



Rogue Valley Sewer Services

Sanitary Sewer - System Development Charge Methodology
February 24, 2004

Presented by
Shaun Pigott Associates
Donovan Enterprises

ROGUE VALLEY SEWER SERVICES (RVS) SYSTEM DEVELOPMENT CHARGE UPDATE

Background

This assessment and update of RVS' system development charge (SDC) structure was done in conjunction with staff and the District's FY '03 Comprehensive Annual Financial Report; the District's internal evaluation of existing—in-ground—assets; planned future improvements contained in the District's capital improvement plan (CIP) along with the two ordinances and four resolutions implementing these SDC structures. *Currently, there is a uniform regional SDC for wastewater treatment of \$1,212. This treatment component of the SDC was outside the scope of this review and is listed here for purposes of providing the full SDC amount required from new connections to the system.* The District itself applies a trunk SDC which varies from \$95 to \$465 within the 5 services areas; and a collection system SDC which also varies from \$198 to \$1,297 within the five areas. The sum of these three SDC elements makes up the total SDC for each of the five services areas. Specific policy alternatives considered during the course of developing this SDC Update include possible consolidation of SDC's, the consistency of current SDC methodologies with new changes to ORS 223 and the fairness/equity in the application and allocation of these fees. The framework for SDC calculation is established by Oregon Revised Statute (ORS) 223.297-314 which is the basis for this review. Under statute, SDC's are one-time fees imposed on new development and have two components: reimbursement and improvement.

The **reimbursement fee** considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is that “future system users contribute no more than an equitable share to the cost of existing facilities.” The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.

The **improvement fee** portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee, each project in the District's capital improvement plan is evaluated to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. An example is a facility which improves collection system capacity to better serve current customers must be eliminated from the improvement fee calculation. Only capacity increasing/level of performance costs provide the basis for the SDC calculation. The improvement SDC is calculated as a function of the estimated number of additional equivalent residential units to be served by the District's facilities over the planning period. Such a fee represents the greatest potential for future SDC changes.

RVS' current SDC structure was established under Ordinance No. 91-7 in June of 1991. This ordinance, compliant with Oregon law, has evolved based on improved capital forecasts within

the District and revisions to ORS 223. For this review, the District has stated a number of objectives:

- Review the basis for the charge to ensure a consistent methodology;
- Develop a rationale for the improvement element of the SDC;
- Address specific policy issues, including the potential for increased consistency in SDC's within the overall RVS service area;
- Consider possible revisions to the structure or basis of the charge that might improve equity or proportionality to demand; and
- Provide clear, orderly documentation of the assumptions, methodology, and results, so that District staff can, by reference, respond to questions or concerns from the public.

SDC Legal Authorization

SDCs are authorized by Oregon Revised Statute (ORS) 223.297-314. The statute is specific in its definition of system development charges, their application, and their accounting. In general, an SDC is a one-time fee imposed on new development or expansion of existing development, and assessed at the time of development approval or increased usage of the system. SB 939, passed by the 2003 legislature, includes many procedural adjustments and clarifications to ORS 223. Overall, the statute is intended to promote equity between new and existing customers by recovering a proportionate share of the cost of existing and planned/future capital facilities that serve the developing property.

Statute further provides the framework for the development and imposition of SDCs and establishes that SDC receipts may only be used for capital improvements and/or related debt service. By definition, an SDC is the sum of two components:

The methodology that determines the **reimbursement fee** portion of the SDC should consider (1) the cost of existing facilities, (2) prior contributed capital, (3) the value of unused capacity, (4) outstanding principal on debt, and (5) other factors identified by the jurisdiction imposing the fee. The methodology must “promote the objective of future system users contributing no more than an equitable share to the cost of existing facilities.” The reimbursement fee calculations will be updated on an annual basis by adding the cost of recently completed projects and updating the current Equivalent Residential Units served by the system.

The methodology used to determine the **improvement fee** portion of the SDC must consider the cost of projected capital improvements needed to increase system capacity or level of performance. In other words, the cost of planned projects that correct existing deficiencies or do not otherwise increase capacity would not be SDC eligible. The improvement fee must also provide a credit for construction of a qualified public improvement. The improvement fee calculations will be updated on an annual basis by adding newly identified capital improvement projects and updating the current Equivalent Residential Units served by the system.

SDC Methodology

Reimbursement Fee—The reimbursement fee represents a buy-in to the value of the District’s existing collection system capacity. Generally, if a system is sized for future growth, the reimbursement fee might be the only charge imposed, since the new customer would be buying existing capacity. When staged system expansion is needed, an improvement fee is imposed to allocate growth-related costs. Even then, the new customer also relies on existing system capacity, so a reimbursement fee is warranted.

In order to apply the statute in determining an equitable reimbursement fee in conjunction with an improvement fee, two points should be highlighted:

- First, the cost of the system to the District’s customers may be far less than the total plant-in-service. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources. Therefore, the net investment by the customer/owners is less.
- Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.

The method used for determining the reimbursement fee accounts for both of these points.

- First, the charge is based on the original investment in the system rather than the gross cost. Therefore, donated facilities, typically including distribution lines, local facilities, and grant-funded facilities, would be excluded from the cost basis. Also, the charge should be based on investments clearly made by the current users of the system and not already supported by new customers. Tax supported activities fail this test since funding sources have historically been from general revenues, or from revenues that emanate, at least in part, from the properties now developing.
- Second, the cost basis is allocated between used and unused capacity, or capacity available to serve growth. In the absence of a detailed asset-by-asset analysis, it is appropriate to allocate the cost of existing facilities between used and available capacity proportionally. This approach reflects the philosophy, consistent with the District’s capital facilities planning, that facilities have been sized to meet the demands of the customer base within the established planning period.

The resulting reimbursement fee precludes new customers from paying for facilities that were obtained at no cost to the District’s customers/owners, and from paying both a full share of the existing system plus a full share of the cost of expanding the system. This approach, therefore, addresses the statutory intent of preventing future growth from paying more than an equitable share.

The consultant team used the original cost method to arrive at a recommended reimbursement element of the SDC. This method uses the original cost of facilities less contributed capital, grants, and principal outstanding on utility bonds and contracts payable to arrive at the net investment that existing ratepayers have made in system capacity.

The following table contains the cost data that was used to develop the proposed reimbursement fee element of the SDC:

Rogue Valley Sewer Services					
Detailed Analysis of Proposed Reimbursement Fee Element of the System Development Charge					
Project Name/Description	Year Placed in Service	Collection	White City Trunk	Eagle Point Tie-In	Regional Interceptor
Total Projects for Year	1972	\$ 26,189			
Total Projects for Year	1973	39,817			
Total Projects for Year	1975	54,650			
Total Projects for Year	1976	358			
Total Projects for Year	1977	107,615			
Total Projects for Year	1978	281,833			
Total Projects for Year	1979	200,735			
Total Projects for Year	1980	51,263			
Total Projects for Year	1981	224,378			
Total Projects for Year	1982	42,438			
Total Projects for Year	1983	8,555			
Total Projects for Year	1984	104,416			
Total Projects for Year	1985	-			
Total Projects for Year	1986	-			
Total Projects for Year	1987	112,738			
Total Projects for Year	1988	19,305			
Total Projects for Year	1989	-			
Total Projects for Year	1990	190,272			
Camp Baker	1991	118,558			
Old Stage South of View	1991	2,790			
South Magnolia	1991	3,600			
Jasmine Avenue	1991	47,440			
Old Stage Road South of Ross	1992	10,111			
Colver Road West of Talent	1992	6,600			
Hanley Road	1992	12,184			
Erickson Air Crane	1993	76,821			
West Ross Lane	1993	12,938			
Eagle Mill Road	1995	15,000			
Beall Lane	1995	15,772			
South Stage Industrial	1995	19,146			
Valley View & Valley View	1995	65,599			
Blackwell Road LID	1997	74,063			
Old Military Road	1997	5,350			
Old Military Road LID	1998	52,785			
Rising Sun	1998	16,736			
Foreign Trade Zone	1998	12,722			
BOC Gasses	1998	22,566			
East Pine/Hamrick	1999	39,432			
Walnut Grove MH Park	1999	15,948			
Central Point East Phase 1,2,5	1999	24,539			
New Haven Estates	1999	25,273			
North Valley Estates	1999	15,175			
Ross Lane LID	2000	6,950			
Canal & Archer LID	2000	7,357			

Rogue Valley Sewer Services
Detailed Analysis of Proposed Reimbursement Fee Element of the System Development Charge
Continued

Project Name/Description	Year Placed in Service	Collection	White City Trunk	Eagle Point Tie-In	Regional Interceptor
Avenue C	1996	\$ 106,986			
Avenue G	1996	671,993			
29th St.--Falcon to G	1996	106,342			
Maple/Amy/Front Streets	1997	1,098,018			
Talent Rehab Phase II	1998	54,459			
Talent Rehab Phase III	1998	156,236			
Talent Rehab Phase 4	1998	248,216			
Royal Avenue Rehabilitation*	2000	1,134,460			
Main Street-Wagner Creek Road	2000	156,187			
Linn Road Reconstruction	2000	19,200			
Front Street Re-alignment, Fairview Ave	2000	18,878			
Garfield Extension	2001	499,830			
West Pine Street, Ph. 1	2001	105,310			
Alliance Trucking	2001	6,240			
Avenue H Re-alignment	1998	77,369			
27th from Ave C to Antelope Road	1998	30,947			
Ione Street Rehabilitation	2000	26,256			
Fargo Buchannon	2001	73,880			
7th Street Rehab	2001	68,080			
Gibson Road	2001	46,312			
Alley From Talent Ave to Roy	2001	39,791			
Fairview Avenue and Front Street	2001	18,878			
Crater Lane	2001	13,940			
Wagner Creek	2001	-			
Teakwood Avenue	2002	276,813			
Avenue F Slip Line	2002	247,540			
Coker Butte Extension	2002	128,004			
Avenue H	2002	101,692			
Dixie Pump Station	2002	46,064			
North Siphon	2002	22,569			
Main Street	2003	253,085			
Front Street Re-alignment	2003	192,057			
Wagner Street, I Street to Talent Elementary	2003	140,264			
Neva Street	2003	8,732			
Bigham Road	2003	171,560			
Oak Street Laterals	2003	21,809			
Buchannon St Laterals	2003	16,500			
I Street Alley	2003	12,150			
White City Trunk	2001		\$ 913,142		
Eagle Point Tie-In	1997			\$ 1,263,132	
OMT-UBCI Intertie	1999				\$ 64,088
OMT Bottleneck	1999				14,739
Flow Monitoring Stations	2000				550,000
LBCI Slipline	2001				580,506
Influent Sewer	2003				568,520
KPS Standby Power	2003				382,532
Subtotal Original Cost of Investments by RVS		\$ 8,606,664	\$ 913,142	\$ 1,263,132	\$ 2,160,385
less: Grant Funding		(636,000)	0	0	0
Net Original Cost of Investments by RVS		7,970,664	913,142	1,263,132	2,160,385
Total Current Equivalent Residential Units (ERUs)		27,521	8,170	2,402	48,779
Calculated Reimbursement Fee per ERU		\$ 289.62	\$ 111.77	\$ 525.87	\$ 44.29

Improvement Fee—The improvement fee represents a proportionate share of the cost to expand the system to accommodate growth. This charge is based on the capital improvement plan established by the District and specifically on costs allocable to growth. Statute requires that the capital improvements used as a basis for the charge be part of an adopted capital improvement schedule, whether as part of a system plan or independently developed, and that the improvements included for SDC eligibility be capacity or level of service expanding. The improvement fee is intended to protect existing customers from the cost burden and impact of expanding a system that is already adequate for their own needs in the absence of growth.

The key step in determining the improvement fee is identifying capital improvement projects that expand the system and the share of those projects attributable to growth. Some projects may be entirely attributable to growth, such as a collection line that exclusively serves a newly developing area. Other projects, however, are of mixed purpose, in that they may expand capacity, but they also improve service or correct a deficiency for existing customers. An example might be a pump station that both expands collections capacity and corrects a chronic flow capacity issue for existing users. In these cases, a rational allocation basis must be defined.

The improvement portion of the SDC is based on the proportional approach toward capacity and cost allocation in that only those facilities (or portions of facilities) that either expand the collection system's capacity to accommodate growth or increase its level of performance have been included in the cost basis of the fee. The District was asked to review its planned capital improvement list in order to assess SDC eligibility. The criteria on the following page were developed to guide the District's evaluation:

**ROGUE VALLEY SEWER SERVICES
STEPS TOWARD EVALUATING
CAPITAL IMPROVEMENT LISTS FOR SDC ELIGIBILITY**

ORS 223

1. Capital improvements mean the facilities or assets used for wastewater collection. This definition DOES NOT ALLOW costs for operation or routine maintenance of the improvements.
2. The SDC improvement base shall consider the cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related.
3. An increase in system capacity is established if a capital improvement increases the “level of performance or service” provided by existing facilities or provides new facilities.

Under RVS’ approach, the following rules will be followed

1. REPAIR COSTS ARE NOT TO BE INCLUDED;
2. REPLACEMENT COSTS WILL NOT BE INCLUDED UNLESS THE REPLACEMENT INCLUDES AN UPSIZING OF SYSTEM CAPACITY AND/OR THE LEVEL OF PERFORMANCE OF THE FACILITY IS INCREASED;
3. NEW REGULATORY COMPLIANCE FACILITY REQUIREMENTS FALL UNDER THE LEVEL OF PERFORMANCE DEFINITION AND SHOULD BE PROPORTIONATELY INCLUDED;
4. COSTS WILL NOT BE INCLUDED WHICH BRING DEFICIENT SYSTEM UP TO ESTABLISHED DESIGN LEVELS.

In developing the improvement fee, the District staff evaluated each of its CIP projects to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Only capacity increasing/level of performance costs were used as the basis for the SDC calculation, as reflected in the capital improvement schedule developed by the District. Population and future demand analysis are based on District projections. The improvement fee is calculated as a function of the estimated number of projected additional equivalent residential units to be served by the District’s facilities over the planning horizon. RVS will also be adjusting the capital costs within its CIP on an annual basis using the Engineering New Record (ENR) inflationary index.

The following table provides the proposed improvement fee calculation:

Rogue Valley Sewer Services Detailed Analysis of Proposed Improvement Fee Element of the System Development Charge									
Project Name/Description	Estimate Year to be Placed in Service	Collection System Projects		White City Trunk Projects		Eagle Point Tie-In Projects		Regional Interceptor Projects	
		Total Cost	Assigned to Growth	Total Cost	Assigned to Growth	Total Cost	Assigned to Growth	Total Cost	Assigned to Growth
Midway Pump Station	2003	80,000	-						
N Ashland Pump Station Rehab	2003	15,000	-						
Ross Lane PS Rehab	2003	30,000	-						
Central Point Pump Station	2004	210,000	-						
North Shasta Avenue	2004	335,389	221,357						
Crater Lake Pump Station	2004	100,000	-						
Eimhurst Pump Station Removal	2004	225,000	-						
Gladstone Re-hab	2004	100,000	15,000						
Atlantic Avenue Re-alignment	2004	100,000	15,000						
Gateway Market	2004	75,000	11,250						
Aloha Sun Park	2004	25,000	3,750						
South Pacific Highway, Wagner Creek to Creel	2005	484,044	319,469						
Valley View Drive, Anjou Club	2005	16,099	2,415						
Avenue G	2005	619,695	408,999						
25th Street, Ave F to Ave G	2005	25,974	3,896						
Terr-Mont Street	2005	250,000	37,500						
West Pine Street, Ph. 2	2006	165,000	108,900						
Meadow Lane	2006	43,050	-						
Foss Road	2006	150,792	81,428						
South Pacific Highway, Mountain View MoHo	2006	22,376	3,356						
Oak - Alder Street	2007	150,000	99,000						
South Shasta Avenue	2007	172,661	25,899						
Bain Street	2007	69,848	37,718						
Talent Avenue	2007	390,813	257,937						
Falcon Street	2007	203,089	134,039						
Avenue C	2007	34,965	5,245						
26th Street, Ave F to Ave G	2007	79,488	11,923						
27th Street, Ave F to Ave G	2007	74,925	11,239						
Golf Course	2010	72,017	28,087						
Gilman Pump Station	2010	150,000	-						
South Pacific Highway, Valley View to New	2010	110,585	72,986						
I Street	2010	89,042	48,083						
Valley View Drive, Talent Ave to end of Alley	2012	50,760	7,614						
White City Trunk, Avenue G	2008			1,485,000	905,850				
N. Medford Interchange	2004							630,000	-
KPS expansion & force main	2007							3,612,400	3,612,400
UBCI 48" relief	2010							5,820,100	5,820,100
Subtotal Present Value of Future Investments by RVS That Add Capacity to the System			\$ 1,972,088		\$ 905,850		\$ -		\$ 9,432,500
Estimated New Equivalent Residential Units (ERUs) over 10 Years (assuming 2% Growth per year)			6,027		1,789		526		10,682
Calculated Improvement Fee per ERU			\$ 327.21		\$ 506.29		\$ -		\$ 883.00

Calculation of SDCs

The following SDC calculations vary from those developed by RVS in that the reimbursement portion is based on original cost. The improvement fee calculation is based on current present cost estimates.

Total SDCs			
Regional Treatment (\$1,212.00)		Collection System SDC (\$616.83)	
White City Trunk (\$618.06)		Eagle Point Tie-In (\$1,143.93)	
		Regional Interceptor (\$927.29)	
	Reimbursement	Improvement	Total
Collection System:			
Original Cost of Improvements	8,606,664		
Less: Grant Money (Royal Avenue)	(636,000)		
Total Current ERUs	27,521		
Reimbursement Fee per ERU	\$289.62		
Projected Present Value Cost of Improvements		4,720,612	
Present Value of Surplus Capacity		1,972,088	
New ERUs over 10 Years (2% Growth)		6,027	
Improvement Fee		\$327.21	
Total SDC per ERU			\$616.83
White City Trunk:			
Original Cost of Improvements	913,142		
Less: Grant Money	-		
Total Current ERU	8,170		
Reimbursement Fee per ERU	\$111.77		
Projected Present Value Cost of Improvements		1,485,000	
Present Value of Surplus Capacity		905,850	
New ERUs over 10 Years (2% Growth)		1,789	
Improvement Fee		\$506.29	
Total SDC per ERU			\$618.06
Eagle Point Tie-In:			
Original Cost of Improvements	1,263,132		
Less: Grant Money	-		
Total Current ERU	2,402		
Reimbursement Fee per ERU	\$525.87		
Projected Present Value Cost of Improvements		-	
Present Value of Surplus Capacity		-	
New ERUs over 10 Years (2% Growth)		526	
Improvement Fee		\$0.00	
Total SDC per ERU			\$525.87
Regional Interceptor:			
Original Cost of Improvements	2,160,385		
Less: Grant Money	-		
Total Current ERU	48,779		
Reimbursement Fee per ERU	\$44.29		
Projected Present Value Cost of Improvements		10,062,500	
Present Value of Surplus Capacity		9,432,500	
New ERUs over 10 Years (2% Growth)		10,682	
Improvement Fee		\$883.00	
Total SDC per ERU			\$927.29

Notes:

1. The original cost of assets placed in service is the basis for the reimbursement fee.
2. Current asset value is used as the basis for the improvement fee.

The SDCs that are calculated on the previous page are in most cases higher than the charges that are currently in place for RVS and the cities due to the inclusion of an improvement portion of the fee. Itemized in the following table is a comparison of the existing and proposed SDCs.

Summary of Existing and Proposed System Development Charges All Figures are Per Equivalent Residential Unit - ERU				
	Treatment	Interceptor or Trunk Sewer	Collection	Total
RVS: ¹				
Existing SDC per ERU	1,212.00	95.00	550.00	1,857.00
Proposed SDC per ERU	<u>1,212.00</u>	<u>927.29</u>	<u>616.83</u>	<u>2,756.12</u>
Difference per ERU	\$ -	\$ 832.29	\$ 66.83	\$ 899.12
Core Area of Central Point: ²				
Existing SDC per ERU	1,212.00	95.00	198.00	1,505.00
Proposed SDC per ERU	<u>1,212.00</u>	<u>927.29</u>	<u>616.83</u>	<u>2,756.12</u>
Difference per ERU	\$ -	\$ 832.29	\$ 418.83	\$ 1,251.12
Eagle Point: ³				
Existing SDC per ERU	1,212.00	465.00	1,297.00	2,974.00
Proposed SDC per ERU	<u>1,212.00</u>	<u>1,143.93</u>	<u>616.83</u>	<u>2,972.76</u>
Difference per ERU	\$ -	\$ 678.93	\$ (680.17)	\$ (1.24)
White City: ³				
Existing SDC per ERU	1,212.00	465.00	550.00	2,227.00
Proposed SDC per ERU	<u>1,212.00</u>	<u>618.06</u>	<u>616.83</u>	<u>2,446.89</u>
Difference per ERU	\$ -	\$ 153.06	\$ 66.83	\$ 219.89
Jacksonville:				
Existing SDC per ERU	1,212.00	245.00	484.39	1,941.39
Proposed SDC per ERU	<u>1,212.00</u>	<u>927.29</u>	<u>616.83</u>	<u>2,756.12</u>
Difference per ERU	\$ -	\$ 682.29	\$ 132.44	\$ 814.73
Footnotes:				
1 Includes the city of Talent, portions of Medford and Phoenix, and other parts of the RVS service are not otherwise identified in this table.				
2 Includes the older portion of Central Point (city limits as of 1993).				
3 Eagle Point and White City do not utilize the regional interceptor system.				

Specific SDC Issues

Some of the most significant revisions to ORS 223 since its inception in 1991 have dealt with record keeping and notification requirements.

In terms of notification, the statute now requires that interested persons contained on the District's "list" of those wishing to be contacted regarding SDC's must be notified of any proposed modifications to SDC methodologies at least 90 days prior to the first hearing. The modified methodology must be available for review at least 60 days in advance of the hearing. Finally if the proposed modification to the improvement portion of the fee involves changes to the capital improvement list, then interested parties on the District's list must be provided written notice of the proposed changes 30 days in advance of any adoption action by the District. Any one person requesting a public hearing on the CIP list change must be granted such a hearing.

Under ORS 223.311 the District must prepare by, January 1 of each year, an accounting of SDC receipts and expenditures. The total amount of SDC revenue "by system" must be captured which is simplified in the District's case given the sole responsibility of collection systems. However, since area-specific SDC's are collected, those would and are being separately accounted for in the document entitled "Annual Reporting SDCs" that is produced for the Board annually. This document does constitute compliance with ORS 223.311.