RESOLUTION NO. 935

A RESOLUTION AMENDING THE METHODOLOGIES FOR A SANITARY SEWER SYSTEM DEVELOPMENT CHARGE.

WHEREAS, the Canby City Council has determined by Ordinance No. 867 that a charge shall be imposed upon new development for acquiring funds for capital improvements, and for reimbursement of constructed excess capacity to the City's sanitary sewer system; and

WHEREAS, said Ordinance No. 867 provides that methodology and charges for capital acquisition, improvements, and reimbursements be established and amended by resolution; and

WHEREAS, Section 26 (4) of Chapter 459 of Oregon Laws 1991 requires that a governing body, when adopting or amending a fee resolution imposing new rates, may include a provision classifying said fees as subject to or not subject to the limitations set in Section 11 (b), Article XI of the Oregon Constitution; and

RESOLVED, that the following methodology for system development charges for the City of Canby, attached here to as Exhibit "A", is hereby adopted to amend the current sanitary sewer system development charge effective immediately.

Proposed Update of the Wastewater Systems Development Charge

Equivalent 3/4" Meters	Meter Size	Total
1.00	¾	$2,235
1.67	1	$3,733
3.33	1 ½	$7,442
5.33	2	$11,912
10.67	3	$23,848
16.67	4	$37,258
33.33	6	$74,492
53.33	8	$119,192
80%	Multiple family	$1,788

BE IT FURTHER RESOLVED that, except as otherwise specified in Ordinance 867, future changes to the methodology and charges resulting solely from inflationary cost impacts shall be measured and calculated annually by the City Recorder and charged according based upon changes in the Engineering News Record Construction Cost Index (ENR Index) of Portland, Oregon, with the current ENR Index as of enactment of this Resolution to be used for the basis of future calculations.

BE IT FURTHER RESOLVED that the Canby City Council hereby classifies the charges imposed herein as not being subject to the limitations imposed by Section 11 (b), Article XI of the Oregon Constitution and that the City Recorder is hereby directed to publish notice in accordance with Section 26 (8) of Chapter 459 of Oregon Laws 1991.

ADOPTED by the Canby City Council on the 20th day of September, 2006.

Melody Thompson

Melody Thompson, Mayor

ATTEST:

Kimberly Scheafer

Kimberly Scheafer
City Recorder Pro Tem

City of Canby
Update Wastewater System Development Charge

City of Canby
Update Wastewater System Development Charge

August 2006

Economic & Financial Analysis
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INTRODUCTION

The City of Canby retained Economic and Financial Analysis (EFA) to update the City's wastewater system development charge. Since the initial SDC was last evaluated in 2001, the City has been updating the SDC using the Construction Cost Index published by McGraw Hill in the magazine *ENR*. This report is based on the May 2006 index of 7,690 (Base Year 1913 = 100).

This update is based on an update of capital improvements made since the last evaluation and revisions to the capital improvements list.

The report contains two main sections. The first updates the reimbursement and improvement fees and compares the current and updated SDCs for wastewater. The second section compares Canby's SDCs to those of 12 other nearby and similarly sized cities in Oregon.

SYSTEM DEVELOPMENT CHARGE

Reimbursement Fee

Table 1 shows the current replacement cost for the existing wastewater treatment plant and major collection system components. Most of the collection system was built by private developers, not by the City's rate payers; therefore, these components are excluded from the system development charge. The current treatment plant has an average daily capacity of 2.0 million gallons per day (mgd) and a current average loading of 1.1 mgd. The land the wastewater treatment plant occupies is valued at its original cost.[1]

Table 1 Summary of Fixed Assets

	Existing Facility	Replacement Cost	Capacity ADWF*	$/gallon
1	**Land**	$330,000	2.80	$0.1179
	Wastewater Treatment Plant			
2	Primary Clarifier	640,000	2.00	0.3200
3	Decant Treatment Basin	200,000	2.00	0.1000
4	Wash Tank	200,000	2.00	0.1000
5	SS Holding Tank	260,000	2.00	0.1300
6	Blower Building & Flammable Storage	160,000	2.00	0.0800
7	Lab Building	250,000	2.00	0.1250
8	Sludge Holding Ponds (3)	410,000	2.00	0.2050
9	Disinfection Contact Basin	200,000	2.00	0.1000
10	1994 WWTP Expansion	4,647,660	2.00	2.3238
11	Odor Control (WWTP)	119,464	2.00	0.0597
12	Screening & Compacting	35,273	2.00	0.0176
13	UV Basin Covers (WWTP)	444,832	2.00	0.2224
14	Retained Site Piping/Outfall	250,000	2.00	0.1250
15	Retained Site Improvements	150,000	2.00	0.0750
16	Aeration Basin Construction (WWTP)	3,028,581	2.80	1.0816
17	Solids Dewatering & Effluent Filtration (WWTP)	2,516,215	2.80	0.8986
	Collection System			
18	Redwood Interceptor	1,307,797	2.00	0.6539
19	Collection System Pumping Stations (6)	1,200,000	2.00	0.6000
20	Township Road (Oversizing Only)	34,932	2.00	0.0175
21	South Pine (Oversizing Only)	46,818	2.00	0.0234
	Totals	$16,431,572		$7.3765

Sources: Land: city of Canby *Comprehensive Annual Financial Report Fiscal Year Ending June 30, 2005*, page 12, Business-Type Activities. Wastewater Treatment Plant and Collection System: Curran McLeod, Inc. Consulting Engineers for the City of Canby, letter to Davin Tramel dated August 25, 2006.

[1] Finance Operations Manager, *Comprehensive annual financial report for the year ending June 30, 2005*, (City of Canby, Oregon) page 12, Business-Type Activities.

* Average Dry Weather Flow in millions of gallons per day (mgd).

All fixed assets except land depreciate, and the money collected from the reimbursement fee is used to either payoff existing debt for the assets or to repair or replace existing assets. In essence new development pays a portion of the cost of maintaining the assets in usable condition. Land does not depreciate nor require replacement; hence in the calculation of the reimbursement fee, its value is kept at the original cost past and current users had to pay. Any additional land to be purchased is included in the improvement fee.

Table 1 also shows the calculation of the cost per gallon per day of capacity for each classification of assets.

The current capacity of the wastewater treatment plant (WWTP) is 2.0 million gallons per day (mgd) except for land that will be useful no matter the size of the treatment plant. Land is divided by the future capacity of the WWTP, 2.8 mgd. Similarly the Aeration Basin (project number 16) and Solids Dewatering & Effluent Filtration (17) components of the WWTP have capacity for 2.8 mgd.

The replacement cost in 2006 dollars divided by the capacity of each component is the cost per gallon of capacity. The average household on a standard size ¾-inch meter produces 226 gallons of sewage per day (average dry-weather flow excluding all inflow and infiltration of water to the sewage collection system). The City's WWTP and collection system were designed assuming 100 gallons of sewage flow per capita per day (gcd). However the actual flows to the WWTP measure closer to 80 gcd than to 100 gcd. The year 2000 US Census reported an average household size of 2.83 persons per household. For this update of the wastewater SDC we assume 80 gcd and 2.83 persons per household.

In total, the cost of all components is $7.3765 per gallon of capacity. The proposed wastewater reimbursement fee for a ¾-inch water line connection is $1,667, (i.e., 226 gpd x $7.3765). Table 2 shows the reimbursement fee by meter size and for living units in a multiple family complex.

The wastewater SDC is increased from the ¾-inch meter based on the equivalent number of ¾-inch meters a particular meter size will provide. For example, a 1½-inch meter is capable of delivering as much water as 3⅓, ¾-inch meters; therefore, the wastewater reimbursement fee for the 1½-inch water meter is 3 ⅓ times more than the fee for a ¾-inch meter.

The proposed reimbursement fee is $145 (9.5 percent) more than the current reimbursement fee.

Table 2 Wastewater Reimbursement Fee by Meter Size and Multiple Family Housing

		Reimbursement Fee		Change	
Equivalent 3/4" Meters	Meter Size	Current	Proposed	$	%
1.00	3/4	$1,522	$1,667	$145	9.5%
1.67	1	2,542	2,784	242	9.5%
3.33	1 1/2	5,068	5,551	483	9.5%
5.33	2	8,112	8,885	773	9.5%
10.67	3	16,240	17,787	1,547	9.5%
16.67	4	25,372	27,789	2,417	9.5%
33.33	6	50,728	55,561	4,833	9.5%
53.33	8	81,168	88,901	7,733	9.5%
80%	Multiple family	$1,218	$1,334	$116	9.5%

Rounded to the nearest $1.00.

Improvement Fee

Table 3 lists the capital improvements that increase the capacity of various components of the WWTP and collection system. The WWTP has a capacity of 2.0 mgd for most components, and the proposed capital improvements will increase the capacity to 2.8 mgd, an increase of 0.8 mgd. The expansion of Project number 1, Secondary Scum Pump Station will have an added capacity of 2.0 mgd and does not currently exist. The other capital improvements will have a total capacity of 2.8 mgd. Since most of these projects are expansion of existing facilities with current excess capacity, we use the total capacity of the plant to determine the cost per unit for all users (current and future).

Similar to the calculation of the reimbursement fee, the project cost divided by its capacity provides a cost per gallon of capacity. For all projects the cost per gallon is $2.5136 per gallon. This cost per gallon multiplied by the average daily flow from a household on a ¾ inch meter provides the wastewater improvement fee of $568 for a ¾-inch water line connection. Similar to the reimbursement fee, the improvement fee is based on meter size and equivalent numbers of ¾-inch meters as shown in Table 4.

The proposed improvement fee is 16.2 percent less than the current improvement fee.

Table 3 Capital Improvements List and Cost per Gallon of Capacity

	Project Description	Cost 2006 $'s	Capacity (ADWF)*	$ per Gallon
1	Secondary Scum Pump Station	$45,000	2	$0.0225
2	Effluent Filtration Equipment	280,000	2.8	$0.1000
3	RV Receiving Station / Drying Bed	120,000	2.8	$0.0429
4	Headworks Screening	320,000	2.8	$0.1143
5	UV Disinfection Upgrade	350,000	2.8	$0.1250
6	Outfall Diffuser Improvements	150,000	2.8	$0.0536
7	Processed Sludge Storage	150,000	2.8	$0.0536
8	Second Primary Clarifier	640,000	2.8	$0.2286
9	Effluent Irrigation Improvements	400,000	2.8	$0.1429
10	Processed Sludge Drying, 2 wt/hr	1,600,000	2.8	$0.5714
11	Lab Facility Expansion	400,000	2.8	$0.1429
12	Odor Control	800,000	2.8	$0.2857
13	System Planning	160,000	2.8	$0.0571
14	Collection System Improvements	1,454,630	2.8	$0.5195
15	Collection System Oversizing	150,000	2.8	$0.0536
	Total	$7,019,630		$2.5136

Source: Curran/McLeod Engineering, Inc. letter to Darvin Tramel, August 25, 2006.
* ADWF is Average Dry-Weather Flow in millions of gallons per day.

Table 4 Wastewater Improvement Fee

		Improvement Fee		Change	
Equivalent 3/4" Meters	Meter Size	Current	Proposed	$	%
1.00	3/4	$678	$568	($110)	-16.2%
1.67	1	1,132	949	(183)	-16.2%
3.33	1 1/2	2,258	1,891	(367)	-16.3%
5.33	2	3,614	3,027	(587)	-16.2%
10.67	3	7,234	6,061	(1,173)	-16.2%
16.67	4	11,302	9,469	(1,833)	-16.2%
33.33	6	22,598	18,931	(3,667)	-16.2%
53.33	8	36,158	30,291	(5,867)	-16.2%
80%	Multiple family	$542	$454	($88)	-16.2%

Rounded to the nearest $1.00.

Update System Development Charge

The sum of the reimbursement fee and improvement fee comprise the wastewater system development charge (SDC). Table 5 shows the summation of the two fees. The proposed wastewater SDC for a ¾-inch water meter is $2,235.

Table 5 Proposed Update of the Wastewater System Development Charge

		Proposed System Development Charge		
Equivalent 3/4" Meters	Meter Size	Reimbursement	Improvement	Total
1.00	3/4	$1,667	$568	$2,235
1.67	1	2,784	949	$3,733
3.33	1 1/2	5,551	1,891	$7,442
5.33	2	8,885	3,027	$11,912
10.67	3	17,787	6,061	$23,848
16.67	4	27,789	9,469	$37,258
33.33	6	55,561	18,931	$74,492
53.33	8	88,901	30,291	$119,192
80%	Multiple family	$1,334	$454	$1,788

Compared to the current wastewater SDC, the proposed SDC is $35 (1.59 percent) more than the current SDC, as shown in Table 6 for all meter sizes.

Table 6 Comparison of Current to Proposed Wastewater SDC

				Change	
Equivalent 3/4" Meters	Meter Size	Current	Proposed	$	%
1.00	3/4	$2,200	$2,235	$35	1.59%
1.67	1	3,674	3,733	$59	1.61%
3.33	1 1/2	7,326	7,442	$116	1.58%
5.33	2	11,726	11,912	$186	1.59%
10.67	3	23,474	23,848	$374	1.59%
16.67	4	36,674	37,258	$584	1.59%
33.33	6	73,326	74,492	$1,166	1.59%
53.33	8	117,326	119,192	$1,866	1.59%
80%	Multiple family	$1,760	$1,788	$28	1.59%

COMPARISON TO OTHER COMMUNITIES

Table 7 compares Canby's current systems development charges to other area communities for a single family housing unit. Canby's total SDCs (for all 5 services)

rank 2nd of the 13 communities surveyed. At $11,456 Canby is second only to West Linn's which totals $24,060, but only slightly higher than the next 5 communities that are all in excess of $10,000 for a single-family house.

Canby's Park SDC ($4,725) ranks 2nd behind West Linn's ($8,029), but it's nearly twice as high as the 3rd ranking park SDC—Lake Oswego at $2,825. All of the other SDCs rank nearer the average. Canby's current wastewater SDC is ranked 9th among the 13 communities.

The proposed Wastewater SDC will add $35 to the total SDC bringing it from $11,456 currently to $11,491. This increase is does not change the City's overall ranking among the 13 communities. Canby's ranking among sewer SDCs also will not change from 9th.

Table 7 Comparison of Systems Development Charges for Selected Oregon Communities

City	Stormwater		Wastewater		Transportation		Parks		Water		Total SDC	
	$	Rank	$	Rank	$	Rank	$	Rank	$	Rank	$	Rank
Albany	$0	11	2,284	8	1,584	11	1,500	10	1,903	10	7,271	11
Canby	**$80**	**10**	**2,200**	**9**	**2,085**	**7**	**4,725**	**2**	**2,366**	**5**	**11,456**	**2**
Corvallis	$168	8	3,528	2	1,924	10	1,870	8	1,395	12	8,885	8
Eugene	$429	5	1,354	13	1,377	12	1,345	11	1,860	11	6,365	12
Forest Grove	$275	6	2,500	6	2,690	5	2,000	6	2,552	4	10,017	7
Gresham	$823	1	1,963	10	1,997	8	1,073	12	2,273	7	8,129	10
Hillsboro	$500	2	2,500	6	2,690	5	2,276	5	3,141	3	11,107	5
Lake Oswego	$112	9	1,921	11	4,420	1	2,825	3	2,108	8	11,386	4
McMinnville	$0	11	2,550	5	1,273	13	2,000	6	0	13	5,823	13
Stayton	$0	11	3,197	3	1,936	9	1,062	13	2,332	6	8,527	9
West Linn	$455	4	5,413	1	4,217	2	8,029	1	5,946	1	24,060	1
Wilsonville	$456	3	1,628	12	2,917	4	2,320	4	4,111	2	11,432	3
Woodburn	$220	7	2,977	4	3,286	3	1,513	9	2,085	9	10,081	6
Average	$293		$2,568		$2,538		$2,623		$2,478		$10,501	

Figure 1 Comparison of SDCs for Selected Oregon Cities