

BEFORE THE BOARD OF COMMISSIONERS FOR MARION COUNTY
STATE OF OREGON, ACTING AS THE GOVERNING BODY FOR THE
BROOKS COMMUNITY SERVICE DISTRICT

In the Matter of the Approval)
of Sewer Rate Charges.)

RESOLUTION # 11-19R

MARION COUNTY CLERK

11 JUL 13 10:52

RECEIVED

The above-entitled matter came before the Governing Body at its meeting of
July 12, 2011 and

WHEREAS the Brooks Community Service District had a grant to fund construction
of its sanitary sewer system from the United States Environmental Protection Agency; and

WHEREAS, the grant requires adoption of a fair and equitable user charge system
which will assure the financial self-sufficiency of the District sewer system; and

WHEREAS, the Brooks Community Service District User Charge Ordinance, as
amended requires adoption of such a system by Resolution; and

WHEREAS, the Sewer Rate Charges are to be reviewed and revised annually;
now, therefore,

IT IS RESOLVED that the Governing Body of the Brooks Community Service
District does hereby adopt the amended "User Rate Study for the Brooks Community
Service District", attached as Exhibit "A", as the rate structure for the use of, or connection
to, the Brooks sewer system effective with the July billing cycle; and

IT IS FURTHER RESOLVED that the rate structure shall be reviewed on or before
June 30, 2011 and every year thereafter; and


Brooks Community Service District
Resolution
Sewer Rate Charges

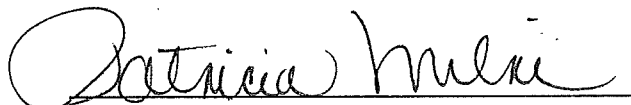
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IT IS FURTHER RESOLVED that the "Sewer Rate Analysis" dated July 1, 2010, as adopted by Resolution dated July 13, 2010, is superseded by this Resolution.

DATED this 12th day of July, 2011.

MARION COUNTY BOARD OF COMMISSIONERS
ACTING AS THE GOVERNING BODY FOR
BROOKS COMMUNITY SERVICE DISTRICT


Chair


Commissioner


Commissioner

A USER RATE STUDY
FOR THE
BROOKS COMMUNITY SERVICE DISTRICT
July 1, 2011

I. INTRODUCTION

In order to carry out its authorized function of sewage collection and disposal, it is necessary and in the public interest that the Brooks Community Service District establish charges for sewerage service in amounts sufficient to pay the expenses of operation and maintaining such facilities, and to provide for the eventual replacement of certain components of such facilities.

The Brooks Community Service District entered into a grant agreement with the Environmental Protection Agency (EPA) for construction of sewage collection and treatment facilities, in which the Brooks Community Service District agrees that the costs of operating and maintaining the sewage collection and treatment works shall be distributed among all users of such collection and treatment works in general proportion to each user's contribution to the total wastewater loading of the sewerage system.

In accordance with EPA requirements, the Brooks Community Service District has adopted the User Charge Ordinance No. 905 governing sewer user charges. This rate study has been based upon that Ordinance and the District Facility Order, and reflects the current best estimates for projected operation, maintenance and replacement (OM&R) costs for the proposed sanitary sewerage facilities. As provided for in the user charge ordinance, actual OM&R costs should be reviewed annually by the Governing Body, and rates adjusted as necessary to insure the Sewer Fund remains self-supporting. That fund should not be supported by non-sewerage revenues, nor should Sewer Fund revenues be used to supplement any other of the Brooks Community Service District fiscal categories (e.g., the Capital Improvement Fund). It is, however, permissible for a surcharge to be applied to the user charge to provide revenue for repayment of loans.

II. NUMBER OF USERS

1. Based upon the Brooks Community Service District Sewerage System billing list, the system's average flow is estimated to be 40,000 gallons per day. By the design year, 2006, estimated average flows are 201,000 gallons/day according to the District's Facility Plan.

Each person is estimated to contribute 75 gallons/day average flow. Using an average of 1.8 people/residence, a typical residence (or "Equivalent Dwelling Unit", EDU) equates to 135 gpd average flow (190 gpd peak day).

2. Section 5 of the District Facility Order specifies a single class of residential user. Therefore, each residence is considered to be one "Equivalent Dwelling Unit" (EDU). Schools, commercial and industrial establishments will be equated to EDU's based upon their respective projected flows and an adjustment factor for risk potential with a minimum of 1 EDU. The adjustment factor for those commercial operations will be 1.25 times the residential EDU. For those industrial establishments, the adjustment factor will be 1.5 times the residential EDU. Their assigned EDU's can be adjusted further in the future to reflect actual wastewater flows and strengths, as determined by flow measurements taken on the establishment's discharge over a one year period. Billing should be based on the intensity of and risks inherent in the use as reflected in the EDU's assigned to the user.
3. EDU's for the current system users have been estimated using a combination of previous analyses conducted for the Facility Plan and Order, current employment data and actual flow measurements. These current EDU figures are summarized below:

RESIDENTIAL EDU'S = 290.5 RESIDENTIAL INCLUDING CHAPARRAL MOBILE HOME RANCH AND GREEN OAKS MOBILE PARK

Commercial/Industrial EDU's (based on projected flows)

<u>Tank #</u>	<u>Customer Name</u>	<u>EDUs</u>	<u>Adj Cml EDUs</u>	<u>Adj Ind EDUs</u>
0	MCPW Operations	1.0	1.250	
2	AGT/Fredrickson	1.0	1.250	
6	Christian School	6.0	7.500	
6A	Elementary School	16.0	20.00	
6B	Willamette Valley Christian School	1.0	1.250	
7	Agra Spray/Beilke	1.0	1.250	
8	Marion County Fire District #1	1.0	1.250	
10	Schipporeit, Harold	1.0	1.250	
11	Withers Lumber	5	6.250	
12	White's Apartments	1.0	1.250	
13	White's Apartments	1.0	1.250	
16B	Briseno	1.0	1.250	
17	Arneson/Assembly of God Church	3.0	3.750	
21	Curry & Company Inc.	20	25.00	
22	Gary Hollin	1.0	1.250	
23	Curry & Company Inc.	4.0	5.00	
24	Oregon Bath & Kitchen/Custom Retread	1.0	1.250	
24	Oregon Bath & Kitchen	1.0	1.250	
25	Oregon Bath & Kitchen/M & H Inc.	1.0	1.250	
26	Kenneth Roudybush/Softball Oregon	1.0	1.250	
27	Chemeketa Community College	1.0	1.250	
38	Iggy's Pub/Ray	6.0	7.500	
40A	Brooks Automotive/Sam Blower	1.0	1.250	
40B	Arnold, Don	1.0	1.250	
40C	Arnold, Don	1.0	1.250	
41	McKay Coml.Div.LLC/Brooks Plaza	2.0	2.500	
42	Brooks Hardware	1.0	1.250	
42	PTI / Flippin	1.0	1.250	
43	Brooks Auto Sales/Velia Duenas	1.0	1.250	
46A	Rick's Custom Fencing	2.0	2.50	
46B	Ralph Atwood & Sons	1.5	1.875	
48	Insituform Technology Inc./Hawkins	1.0	1.250	
50	Insituform Technology Inc./Hawkins	7.0	8.750	
53	Brooks Market Deli/WSCO Petroleum Corp	12.0	-	18.000
53C	Pacific Stair Co. Inc	7.0	8.750	
53D	Pacific Stair Co. Inc	1.0	1.250	
53E	Pacific Stair Co. Inc	1.0	1.250	
55	Ponderosa Leasing/Hochstetler	1.0	1.250	
56	Ponderosa Leasing/Hochstetler	1.0	1.250	
57	The Bryant Tree Experts	1.0	1.250	
58	Chemeketa Community College	1.0	1.250	
58A	Chemeketa Community College	2.0	2.5	
58B	Chemeketa Community College	2.0	2.50	
58C	Chemeketa Community College	2	2.50	
59	Post Office	1.0	1.250	

<u>Tank #</u>	<u>Customer Name</u>	<u>EDUs</u>	<u>Adj Cml EDUs</u>	<u>Adj Ind EDUs</u>
121-151B	Bethel Park		23.2	29.000
	121 tabernacle	8.0	10.000	
	121A tab/conf center	1.7	2.125	
	122 conference center	1.6	2.000	
	126 apartments/hotel	1.8	2.250	
	127 mission house	1.0	1.250	
	128 burger stand	0.0	0.0	
	130 admin. Building	0.7	0.875	
	151 cabin @ #73	5.4	6.750	
	151A rest rooms	2.4	3.000	
	151B rv dump	0.6	0.750	
179A	COVANTA		30.0	45.00
180	Pilot Corp		83.0	103.750
181	May Trucking		7.50	9.38
182	May Trucking		12.0	18.00
184	May Trucking Office		10.0	12.5
195	Chalet Restaurant		9.6	12.000
200	Freightliner		5.8	7.250
200B	Esley Truck Accessories		1.0	1.250
201	Antique Powerland		1.0	1.250
203	Antique Powerland		2.0	2.500

TOTAL ESTIMATED EDU'S IN 2011-693.5

4. Growth will occur within Brooks Community Service District over the next twenty years, adding new connections and more EDU's. The projected increase in average daily flows over the 20-year design period is 140,000 gallons/day. At 135 gpd/EDU, this equates to an increase of about 51 EDU's/year. This rate of increase has not currently been realized.

III. REVENUE REQUIREMENTS

1. Overall Budget
The Facilities Plan provided an initial estimate of projected OM&R costs. These have been refined and are summarized below.

BROOKS COMMUNITY SERVICE DISTRICT
PROPOSED ANNUAL BUDGET, OM&R FUND

REVENUES	
RESIDENTIAL COMMERCIAL/INDUSTRIAL USER FEES	\$214,000
NET WORKING CAPITAL	233,260
INTEREST	1,450
WATER	6,500
OTHER	22,000
DELINQUENCES	<u>8,200</u>
TOTAL REVENUES	\$485,410

MATERIALS AND SUPPLIES

OFFICE SUPPLIES	\$	100
FIELD SUPPLIES		2,500
DEPARTMENTAL SUPPLIES		2,800
GASOLINE		4,100
PARTS		12,000
POSTAGE		225
ELECTRICITY		2,650
AUDIT SERVICES		2,350
PUBLIC WORKS SERVICES		139,000
LABORATORY SERVICES		3,400
ADVERTISING		1,750
MISC CONTRACTUAL SERVICES		8,200
MAINT – VEHICLE & RADIO		4,750
MAINT – SEWER FACILITIES		51,500
EQUIPMENT RENTAL		500
INSURANCE PREMIUM		2,000
TRAVEL – MILEAGE (PERSONAL AUTO)		325
MEALS		250
LODGING		600
CONFERENCES		250
TRAINING		400
DUES & MEMBERSHIPS		380
PROFESSIONAL LICENSES		200
PERMITS – NPDES		1,250
MISCELLANEOUS		100
LEGAL SERVICES		300
WATER		4,000
BUILDING RENT		<u>900</u>
TOTAL MATERIALS AND SUPPLIES		\$246,780
SEWER TREATMENT FACILITY		40,000
CONTINGENCIES		63,630
UAPPROPRIATED ENDING FUND BALANCE		<u>135,000</u>
TOTAL EXPENSES		\$485,410

2. Replacement of Facilities

In addition to the O&M costs, Brooks Community Service District must provide a "reserve fund" for replacement of certain components of the sewerage facilities. These items as of initial startup are summarized below. These figures are subject to change as new or additional equipment is added.

Replacement Requirement Over 20 Year Design Period

a.	STEP Pumps 200 @ \$250	=	\$ 50,000
b.	Air Release Valves 6 @ \$625	=	\$ 3,750
c.	Chlorinator	=	\$ 15,000
d.	Flow Meters	=	\$ 7,800
e.	Wastewater Samplers	=	\$ 5,000
f.	Simplex Control Panels 170 @ \$182	=	\$ 30,940
g.	Duplex Control Panels 15 @ \$425	=	\$ 6,375
	Total	=	\$118,865

or \$4,421/year with rate of return = 3% over inflation

Replacement of the outfall line, sewer pipes and other District property is also included in the reserve funds.

IV. USER CHARGE SYSTEM

Annual revenues can be expected from two basic sources: monthly sewer charges and connection fees both are discussed below:

1. As projected in Section II-4 above, an estimated 51 EDUs will connect to the system each year. The connections made inside the original District will result in no net revenue to the District. Connection made in areas annexed to the District, however, will result in a fee based on project cost, outstanding debt and system capacity. Assuming 50% of connections are in annexed areas; these fees will generate some revenue for the District. This revenue, however, will be very erratic from year to year and not suitable for operation and maintenance funding. Also, EPA regulations do not allow the District to depend upon such connection fees to support (even partially) the sewerage system's OM&R costs. Therefore, the base monthly sewer user charge must cover all OM&R costs. Any connection fees can and should be applied to sewer system debt retirement or necessary capital improvements.
2. As developed in Section III, the system's projected annual OM&R requirement is \$485,410. These costs will be spread over the industrial, commercial and residential users via the monthly user charge billing.

V. DEBT RETIREMENT

1. The \$1,675,000 in 20-year revenue bonds was retired in June 2009.

VI. DETERMINATION OF BOD AND TSS SURCHARGE RATES

Brooks Community Service District's sewerage system has been planned and designed to treat domestic strength wastewater. Abnormally high strength wastes disrupt the District's treatment capacity, and warrant a surcharge to reflect this financial impact. An appropriate surcharge is derived below:

1 EDU = \$27.00/mo. for treating 4185 gallons/month =
\$6.45/1,000 gal./month.

Estimated cost allocations for operation and maintenance (O&M) of District wastewater treatment facilities are:

Flow	= 60% of O&M costs
Biochemical Oxygen Demand (BOD)	= 20% of O&M costs
Total Suspended Solids (TSS)	= 20% of O&M costs

The strengths of average residential users wastes, at the influent of the septic tanks, are estimated at:

BOD - 250 mg/l
TSS - 300 mg/l

The monthly O&M cost of treating such waste is \$6.45 per 1000 gal. The \$6.45 is broken down as follows:

Flow = 60% x \$6.45 = \$ 3.87/1,000 gallons (the \$3.87 figure does not include treatment cost for BOD and TSS contained within the 1,000 gallons).

BOD = 20% x \$6.45 = \$1.29 for treatment of the BOD @
250 mg/l contained in 1,000 gallons of waste.

TSS = 20% x \$6.45 = \$1.29 for treatment of the TSS @
300 mg/l contained in 1,000 gallons of waste.

Calculations of High Strength Surcharges

The following calculations establish the increased costs attributable to an assumed 25 mg/l increase in each components concentrations.

$$25 \text{ mg/l of BOD per 1,000 gallons is equivalent to} \\ \$1.29 \times \frac{25 \text{ mg/l}}{250 \text{ mg/l}} = \$0.13 \text{ per 25 mg/l per 1,000 gallons.}$$

$$25 \text{ mg/l of TSS per 1,000 gallons is equivalent to} \\ \$1.29 \times \frac{25 \text{ mg/l}}{300 \text{ mg/l}} = \$0.11 \text{ per 25 mg/l per 1,000 gallons.}$$

Therefore, any non-residential user with sewage strengths greater than the average of residential wastes (in this case, 250 mg/l BOD and 300 mg/l TSS at the septic tank inlet) should pay an additional charge of \$0.13 per 1,000 gallons for each 25 mg/l of BOD above 250 mg/l and \$0.11 for each 25 mg/l of TSS above 300 mg/l, plus the costs of testing as required.

VII. ANNEXATIONS FEES

The facility order specifies annexed areas reimburse the District for the full cost of the fraction of system capacity used. The 2011-12 annexation fees are therefore:

$$\text{Annexation fee/EDU} = \\ \frac{\text{Project cost} - \text{indebtedness}}{\text{project capacity}} = \frac{\$3,400,000 - \$0}{1,489 \text{ EDU}} = \$2283/\text{EDU}(+-)$$

VIII. SUMMARY

- | | <u>Annual Requirement</u> | <u>Monthly Charge/EDU</u> |
|--|---------------------------|---------------------------|
| 1. OM&R | \$485,410 | \$27.00 |
| 2. EDUs for commercial users shall be figured at 1.25 times the residential EDU and industrial users shall be figured at 1.50 times the residential EDU. | | |
| 3. Connection Fee for New Users Outside Original District = \$2,283/EDU or \$16.91 per gallon per day average dry weather flow. | | |
| 4. High Strength Surcharge for BOD = \$0.13/1,000 gal. for each 25 mg/l above 250 mg/l at septic tank inlet. | | |
| 5. High Strength Surcharge for TSS = \$0.11/1,000 gal. for each 25 mg/l above 300 mg/l at septic tank inlet. | | |
| 6. In the event collected monthly sewer user fees are less than projected or due, rates may have to be increased. | | |