



MEMORANDUM

TO: Michael Adams, City of Sweet Home

FROM: Paul L. Matthews
Kerstin S. Rock

DATE: November 11, 2004

SUBJECT: Water SDC Methodology

PROJECT: P162.041.SD

Introduction

Like many municipal water suppliers in Oregon, the City of Sweet Home (City) is faced with increasing costs for the expansion of its water system's capacity to serve growth. To mitigate this cost of growth in its water system, the City has historically assessed system development charges (SDCs) to new customers. As part of its routine business practices, the City has engaged Integrated Utilities Group, Inc. (IUG) to review its SDCs to ensure these charges are:

- Fair and Equitable, and
- Avoid subsidizing either growth or existing customers.

The assessment of SDCs in Oregon is governed by state law.¹ Among other requirements, Oregon Revised Statutes (ORS) 223.304 requires that "...the methodology supporting the system development charge shall be available at least 60 days prior to the first hearing." This memorandum presents the proposed SDC methodology for the City.

SDC Methodology

The proposed SDC methodology is based on historical investments by the City and future capital improvements as identified by City staff based on the existing water master plans and City staff's knowledge of the system. This methodology employs cost indices as allowed by ORS 223.304² to account for future inflation.

¹ See Oregon Revised Statutes (ORS) 223.297 to 223.314.

² ORS 223.304 states in part: "A change in the amount of a reimbursement fee or an improvement fee is not a modification of the system development charge if the change in the amount is based on the periodic application of an adopted specific cost index or on a modification to any of the factors related to rate that are incorporated in the established methodology."

MEMORANDUM

Page 2

November 11, 2004

Reimbursement Fee

The reimbursement fee is based on the capacity buy-in approach, and requires three steps:

1. Fixed asset valuation,
2. Capacity definition, and
3. Assessment schedule.

The following is a description of each step.

Fixed Asset Valuation

Under the proposed methodology, the value of the City's fixed assets is based on the replacement cost new less depreciation (RCNLD) estimates developed by the City based on insurance coverage estimates and Linn County's land and property values. In addition to the City's fixed assets, the valuation also includes \$496,641 in cash and other reserves.

The City's system is designed to meet the needs of its customers and provide safe and reliable water service throughout its service area. The system consists of many individual components that serve specific functions. To estimate the value of assets related to each function, the RCNLD of each asset is allocated to one or more of ten functions. The City's functions are:

1. Source of Supply
2. Raw Water Pumping
3. Treatment
4. Net Storage
5. Pumping
6. Distribution
7. Direct Fire
8. Meters & Services
9. Treatment Train
10. Excluded from SDC

Assets captured under the *Distribution*, *Direct Fire*, and *Meters & Services* functions are typically contributed by developers and thus will be excluded from the calculation of the reimbursement fee SDC. To explicitly show the amount of excluded assets, the assets initially assigned to these three system functions were reassigned to the *Excluded from SDC* function. Table 1 summarizes the asset values attributed to each function. Based on the analysis, the total value of the City's system assets for fiscal year (FY) 2004 including a credit for existing debt⁵ is \$23.40 million. Of the total value, \$17.3 million are considered as contributed or obsolete assets.

⁵ The amount of outstanding debt service was estimated to be \$732,112 for the 1992 OEDD Promissory Note. The total net value of the system was therefore calculated by reducing the total system value of \$24.14 million by the amount of outstanding debt.

MEMORANDUM

Page 3

November 11, 2004

Thus, for the purpose of establishing a reimbursement SDC, the City's water system is valued as \$6.1 million.

Capacity Definition

The next step in determining the reimbursement fee under the capacity buy-in approach is to define the system capacity. Specifically, under the capacity buy-in approach the system capacity is based on the unused capacity of the system for each function identified above. The City provided data used for this analysis.

Table 2 lists the current capacities of each function. Table 3 estimates the amount of capacity in the existing system that is available for growth. Underlying the numbers shown in this table is the assumption that one equivalent dwelling unit (EDU) consumes 800 cubic feet of water per month or 26.3 cubic feet per day. This estimate is based on the City's historical consumption data for all 3/4-inch residential meters in FY2002 and FY2003. The amount of storage required per EDU is 69.03 cubic feet. Using these assumptions and the capacities for each function summarized in Table 3, the number of EDUs that can be served by each function are calculated. Subtracting the amount of EDUs currently served by the utility generates the number of EDUs available for growth. A description of how the number of EDUs currently served by the City is estimated follows below.

Assessment Schedule Development

Table 4 provides an inventory of the number of EDUs by meter size. The number of EDUs is based on the number of meters by size and the associated equivalency factor. The equivalency factors are calculated based on the average daily use of a single-family residential meter with a 3/4-inch meter.

Analysis of the City's historical consumption records for FY2002 and FY2003 indicated that the number of observations underlying the equivalency factors for meters greater than 1 1/2-inch were too small for the data to be reliable. The proposed methodology augments the City's historical data for meters above 1 1/2-inch in size by equivalency factors developed for the Tualatin Valley Water District (TVWD). Although a different agency, comparison of the data for the utilities showed little variation in the consumption of meters up to 1 1/2-inch. The proposed equivalency schedule is presented in Table 4.

Based on the number of meters served by the City in July 2004 and the equivalency schedule presented in Table 4, the total number of EDUs served by the City is 3,638.

MEMORANDUM

Page 4

November 11, 2004

Fee Calculation

The total costs to be recovered from the reimbursement fee SDC are based on the percentage of remaining capacities by functions calculated in Table 3 and the total system asset values shown in Table 1. Table 5 presents the total reimbursement amount by function. The total amount attributable to the reimbursement fee is \$3,124,723. Table 6 calculates the reimbursement fee per EDU for each of the functions. The total reimbursement fee per EDU is \$737.

Improvement Fee

The improvement fee is based on the City's adopted capital improvement program (CIP). Specifically, the proposed improvement fee considers the proposed CIP projects for the period of FY2005 through FY2010.

To calculate an improvement fee based on the improvement cost approach, the following three tasks must be completed:

1. Multi-purpose project allocations,
2. Capacity definitions, and
3. Assessment schedule development.

Multi-Purpose Project Allocations

Allocating the costs of multi-purpose projects is an integral part of calculating an improvement fee. A multi-purpose project is an improvement that will serve both growth and address existing needs. Few projects are designed and built exclusively to serve growth or solve an existing deficiency. Rather, projects are designed to maximize economies of scale in design and construction. Therefore, projects serving both growth and rehabilitation/upgrade (i.e., multi-purpose projects) are allocated to growth and non-growth.

Table 7 lists each project along with its cost and the year of planned construction. In many cases two or more capital projects are part of an improvement of a particular system function. To avoid potential double-counting of added capacities, all projects were first assigned to functions and then grouped into project groups⁸. Table 8 summarizes the allocation of capital projects to functions. Tables 9 through 13 show the assignment of capacities of the projects to project groups. Based on this information, Table 14 summarizes the percent of capacities available for growth and the resulting improvement fee amount attributable to each system function. The total amount attributed to the improvement fee is \$5,947,675.

Capacity Definition

Table 15 summarizes the system capacities added by function. Similarly, Table 16 presents the estimated number of EDUs available for growth by function.

⁸ Some improvements require multiple projects to add capacity. To avoid double-counting capacity, the projects are grouped together and the added capacity reflects the total added capacity.

MEMORANDUM

Page 5

November 11, 2004

Assessment Schedule

Similar to the reimbursement fee, the improvement fee portion of the City's proposed SDC will be based on meter size. Table 4 presents the number of EDUs for each meter size.

Fee Calculation

The improvement fee is calculated based on the cost of the growth-related capital projects and the additional capacities estimated by these projects. Table 17 summarizes the improvement fee by system function. Based on the CIP developed by the City, the improvement fee per EDU is \$478.

Recommendations

As shown in Tables 6 and 17, the total reimbursement and improvement fees are calculated to be \$737 and \$478 respectively, for a total SDC of \$1,215 per EDU. Table 18 presents the resulting schedule of SDCs by meter size.

Table 1: Net Fixed Asset Valuation	
Description	FY 2004 Assets
Source of Supply	\$0
Raw Water Pumping	40,023
Treatment	0
Net Storage	2,578,109
Transmission	3,376,808
Pumping	75,171
Distribution	0
Direct Fire	0
Meters & Services	0
Treatment Train	0
Exclude from SDC	17,344,547

Total	\$23,414,659

Table 2: System Component Capacities		
System Component	Capacities	Units
Source of Supply	1.5	MGD
Raw Water Pumping	1.5	MGD
Treatment	1.5	MGD
Net Storage	3.8	MG
Transmission	1.5	MGD
Pumping	1.5	MGD
Distribution	0	MGD
Direct Fire	0	EDU
Meters & Services	0	Eq. Mtr.
Treatment Train	0	MGD
Exclude from SDC	0	EDU

Table 3: Used and Unused Capacities of Existing System

Source of Supply	26.3	Cubic Feet per Day	133,690	7,625	3,638	3,987	52.29%
Raw Water Pumping	26.3	Cubic Feet per Day	133,690	7,625	3,638	3,987	52.29%
Treatment	26.3	Cubic Feet per Day	133,690	7,625	3,638	3,987	52.29%
Net Storage	69.0	Cubic Feet	133,690	7,330	3,638	3,693	50.37%
Transmission	26.3	Cubic Feet per Day	133,690	7,625	3,638	3,987	52.29%
Pumping	26.3	Cubic Feet per Day	133,690	7,625	3,638	3,987	52.29%
Distribution	26.3	Cubic Feet per Day	133,690	0	3,638	0	0%
Direct Fire	1.0	EDU	1	0	3,638	0	0%
Meters & Services	1.0	Eq. Mtr.	1	0	3,638	0	0%
Treatment Train	26.3	Cubic Feet per Day	133,690	0	3,638	0	0%
Exclude from SDC	1.0	EDU	1	0	3,638	0	0%

Table 4: Inventory of EDUs for FY2004

Meter Size	Number of Meters	Equivalency Factor	EDUs
3/4-Inch	2,283	1.00	2,283
1-Inch	73	2.12	155
1 1/2-Inch	38	7.96	302
2-Inch	21	15.13	318
3-Inch	2	28.03	56
4-Inch	7	45.34	317
6-Inch	1	73.83	74
8-Inch	1	132.78	133
Total	2,426		3,638

Table 5: Calculation of Reimbursement Totals		
System Component	Capacity Available for Growth	Reimbursement Total
Source of Supply	52.29%	\$0
Raw Water Pumping	52.29%	20,929
Treatment	52.29%	0
Net Storage	50.37%	1,298,721
Transmission	52.29%	1,765,766
Pumping	52.29%	39,308
Distribution	0.00%	0
Direct Fire	0.00%	0
Meters & Services	0.00%	0
Treatment Train	0.00%	0
Exclude from SDC	0.00%	0
Total		\$3,124,723

Table 6: Reimbursement Fee per EDUs	
System Component	Proposed Reimbursement SDC
Source of Supply	\$0
Raw Water Pumping	5
Treatment	0
Net Storage	279
Transmission	443
Pumping	10
Distribution	0
Direct Fire	0
Meters & Services	0
Treatment Train	0
Exclude from SDC	0

Total	\$737

Table 7: Overview of CIP Projects (2005 - 2010)		
Description	Total Project Cost	Year of Construction
New H2O Plant Intake & Supply Line	\$2,151,000	2005
Chemical Injection	137,000	2005
New Treatment Units (6 MGD)	1,725,000	2005
New Building (expandable to 10 MGD)	1,170,000	2005
Clearwell (10 MGD)	618,960	2005
Backwash Ponds	188,700	2005
Facility	38,190	2005
Electrical/Controls/Security	669,000	2005
Dam Connection & Intake	150,000	2005
Air backwash & In-Line valves	156,000	2005
Line Replacement - 2" Program	350,000	2005
1st & Sunset	345,000	2005
Juniper - 6th	300,000	2005
8th & Alder	310,000	2005
17th - 18th	324,000	2005
9th Avenue	303,000	2005
22nd - 23rd Avenue	440,000	2005
Reservoir Replacement - 1.5 Mill Gallon	1,500,000	2005
Total	\$10,875,850	

Table 8: Allocation of CIP to System Functions

Description	Source of Supply	Raw Water Pumping	Treatment	Net Storage	Transmission	Pumping	Distribution	Direct Fire	Meters & Services	Treatment Train	Exclude from SDC	Unused 1	Unused 2	#REF!
New H2O Plant Intake & Supply Line	\$0	\$0	\$2,151,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	#REF!
Chemical Injection	0	0	137,000	0	0	0	0	0	0	0	0	0	0	#REF!
New Treatment Units (6 MGD)	0	0	1,170,000	0	0	0	0	0	0	1,725,000	0	0	0	#REF!
New Building (expandable to 10 MGD)	0	0	618,960	0	0	0	0	0	0	0	0	0	0	#REF!
Clearwell (10 MGD)	0	0	188,700	0	0	0	0	0	0	0	0	0	0	#REF!
Backwash Ponds	0	0	38,190	0	0	0	0	0	0	0	0	0	0	#REF!
Facility	0	0	669,000	0	0	0	0	0	0	0	0	0	0	#REF!
Electrical/Controls/Security	150,000	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Dam Connection & Intake	156,000	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Air backwash & In-Line valves	0	0	0	0	0	0	0	0	0	0	350,000	0	0	#REF!
Line Replacement - 2" Program	0	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
1st & Sunset	0	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Juniper - 6th	0	0	0	0	0	0	0	0	0	0	300,000	0	0	#REF!
8th & Alder	0	0	0	0	0	0	0	0	0	0	310,000	0	0	#REF!
17th - 18th	0	0	0	0	0	0	0	0	0	0	324,000	0	0	#REF!
9th Avenue	0	0	0	0	0	0	0	0	0	0	303,000	0	0	#REF!
22nd - 23rd Avenue	0	0	0	0	0	0	0	0	0	0	440,000	0	0	#REF!
Reservoir Replacement - 1.5 Mill Gallon	0	0	0	1,500,000	0	0	0	0	0	0	0	0	0	#REF!
	\$396,000	\$0	\$4,972,850	\$1,500,000	\$0	\$0	\$0	\$0	\$0	\$1,725,000	\$2,372,000	\$0	\$0	#REF!

Table 9: Allocation of Source of Supply Expansion Costs

Description	Total Project Costs	Total Project Capacity	Total New Capacity	Capacity Units	Percent Cost for New Capacity	Cost of New Capacity	Project Group	Added Capacity
New H2O Plant Intake & Supply Line	\$0	0.00	0.00	MGD	0.00%	\$0	0	0.00
Chemical Injection	0	0.00	0.00	MGD	0.00%	0	0	0.00
New Treatment Units (6 MGD)	0	0.00	0.00	MGD	0.00%	0	0	0.00
New Building (expandable to 10 MGD)	0	0.00	0.00	MGD	0.00%	0	0	0.00
Clearwell (10 MGD)	0	0.00	0.00	MGD	0.00%	0	0	0.00
Backwash Ponds	0	0.00	0.00	MGD	0.00%	0	0	0.00
Facility	0	0.00	0.00	MGD	0.00%	0	0	0.00
Electrical/Controls/Security	0	0.00	0.00	MGD	0.00%	0	0	0.00
Dam Connection & Intake	150,000	3.75	3.03	MGD	80.91%	121,372	1	3.03
Air backwash & In-Line valves	156,000	3.75	3.03	MGD	80.91%	126,227	1	0.00
Line Replacement - 2" Program	0	0.00	0.00	MGD	0.00%	0	0	0.00
1st & Sunset	0	0.00	0.00	MGD	0.00%	0	0	0.00
Juniper - 6th	0	0.00	0.00	MGD	0.00%	0	0	0.00
8th & Alder	0	0.00	0.00	MGD	0.00%	0	0	0.00
17th - 18th	0	0.00	0.00	MGD	0.00%	0	0	0.00
9th Avenue	0	0.00	0.00	MGD	0.00%	0	0	0.00
22nd - 23rd Avenue	0	0.00	0.00	MGD	0.00%	0	0	0.00
Reservoir Replacement - 1.5 Mill Gallon	0	0.00	0.00	MGD	0.00%	0	0	0.00
Total	\$306,000					\$247,599		3.03

Table 10: Allocation of Treatment Expansion Costs

Description	Total Project Costs	Total Project Capacity	Total New Capacity	Capacity Units	Percent Cost for New Capacity	Cost of New Capacity	Project Group	Added Capacity
New H2O Plant Intake & Supply Line	\$2,151,000	3.75	3.03	MGD	80.91%	\$1,740,478	1	3.03
Chemical Injection	137,000	3.75	3.03	MGD	80.91%	110,853	1	0.00
New Treatment Units (6 MGD)	0	0.00	0.00	MGD	0.00%	0	0	0.00
New Building (expandable to 10 MGD)	1,170,000	3.75	3.03	MGD	80.91%	946,704	1	0.00
Clearwell (10 MGD)	618,960	3.75	3.03	MGD	80.91%	500,831	1	0.00
Backwash Ponds	188,700	3.75	3.03	MGD	80.91%	152,686	1	0.00
Facility	38,190	3.75	3.03	MGD	80.91%	30,901	1	0.00
Electrical/Controls/Security	669,000	3.75	3.03	MGD	80.91%	541,320	1	0.00
Dam Connection & Intake	0	0.00	0.00	MGD	0.00%	0	0	0.00
Air backwash & In-Line valves	0	0.00	0.00	MGD	0.00%	0	0	0.00
Line Replacement - 2" Program	0	0.00	0.00	MGD	0.00%	0	0	0.00
Ist & Sunset	0	0.00	0.00	MGD	0.00%	0	0	0.00
Juniper - 6th	0	0.00	0.00	MGD	0.00%	0	0	0.00
8th & Alder	0	0.00	0.00	MGD	0.00%	0	0	0.00
17th - 18th	0	0.00	0.00	MGD	0.00%	0	0	0.00
9th Avenue	0	0.00	0.00	MGD	0.00%	0	0	0.00
22nd - 23rd Avenue	0	0.00	0.00	MGD	0.00%	0	0	0.00
Reservoir Replacement - 1.5 Mill Gallon	0	0.00	0.00	MGD	0.00%	0	0	0.00
Total	\$4,972,850					\$4,023,774		3.03

Table 11: Allocation of Net Storage Expansion Costs

Description	Total Project Costs	Total Project Capacity	Total New Capacity	Capacity Units	Percent Cost for New Capacity	Cost of New Capacity	Project Group	Added Capacity
New H2O Plant Intake & Supply Line	\$0	0.00	0.00	MG	0.00%	\$0	0	0.00
Chemical Injection	0	0.00	0.00	MG	0.00%	0	0	0.00
New Treatment Units (6 MGD)	0	0.00	0.00	MG	0.00%	0	0	0.00
New Building (expandable to 10 MGD)	0	0.00	0.00	MG	0.00%	0	0	0.00
Clearwell (10 MGD)	0	0.00	0.00	MG	0.00%	0	0	0.00
Backwash Ponds	0	0.00	0.00	MG	0.00%	0	0	0.00
Facility	0	0.00	0.00	MG	0.00%	0	0	0.00
Electrical/Controls/Security	0	0.00	0.00	MG	0.00%	0	0	0.00
Dam Connection & Intake	0	0.00	0.00	MG	0.00%	0	0	0.00
Air backwash & In-Line valves	0	0.00	0.00	MG	0.00%	0	0	0.00
Line Replacement - 2" P program	0	0.00	0.00	MG	0.00%	0	0	0.00
1st & Sunset	0	0.00	0.00	MG	0.00%	0	0	0.00
Juniper - 6th	0	0.00	0.00	MG	0.00%	0	0	0.00
8th & Alder	0	0.00	0.00	MG	0.00%	0	0	0.00
17th - 18th	0	0.00	0.00	MG	0.00%	0	0	0.00
9th Avenue	0	0.00	0.00	MG	0.00%	0	0	0.00
22nd - 23rd Avenue	0	0.00	0.00	MG	0.00%	0	0	0.00
Reservoir Replacement - 1.5 Mill Gallon	1,500,000	1.50	0.50	MG	33.33%	500,000	0	0.50
Total	\$1,500,000					\$500,000		0.50

Table 12: Allocation of Treatment Train Expansion Costs

Description	Total Project Costs	Total Project Capacity	Total New Capacity	Capacity Units	Percent Cost for New Capacity	Cost of New Capacity	Project Group	Added Capacity
New H2O Plant Intake & Supply Line	\$0	0.00	0.00	MGD	0.00%	\$0	0	0.00
Chemical Injection	0	0.00	0.00	MGD	0.00%	0	0	0.00
New Treatment Units (6 MGD)	1,725,000	2.25	1.53	MGD	68.19%	1,176,302	0	1.53
New Building (expandable to 10 MGD)	0	0.00	0.00	MGD	0.00%	0	0	0.00
Clearwell (10 MGD)	0	0.00	0.00	MGD	0.00%	0	0	0.00
Backwash Ponds	0	0.00	0.00	MGD	0.00%	0	0	0.00
Facility	0	0.00	0.00	MGD	0.00%	0	0	0.00
Electrical/Controls/Security	0	0.00	0.00	MGD	0.00%	0	0	0.00
Dam Connection & Intake	0	0.00	0.00	MGD	0.00%	0	0	0.00
Air backwash & In-Line valves	0	0.00	0.00	MGD	0.00%	0	0	0.00
Line Replacement - 2" Program	0	0.00	0.00	MGD	0.00%	0	0	0.00
1st & Sunset	0	0.00	0.00	MGD	0.00%	0	0	0.00
Juniper - 6th	0	0.00	0.00	MGD	0.00%	0	0	0.00
8th & Alder	0	0.00	0.00	MGD	0.00%	0	0	0.00
17th - 18th	0	0.00	0.00	MGD	0.00%	0	0	0.00
9th Avenue	0	0.00	0.00	MGD	0.00%	0	0	0.00
22nd - 23rd Avenue	0	0.00	0.00	MGD	0.00%	0	0	0.00
Reservoir Replacement - 1.5 Mill Gallon	0	0.00	0.00	MGD	0.00%	0	0	0.00
Total	\$1,725,000					\$1,176,302		1.53

Table 13: Allocation of Exclude from SDC Expansion Costs

Description	Total Project Costs	Total Project Capacity	Total New Capacity	Capacity Units	Percent Cost for New Capacity	Cost of New Capacity	Project Group	Added Capacity
New H2O Plant Intake & Supply Line	\$0	0.00	0.00	EDU	0.00%	\$0	0	0.00
Chemical Injection	0	0.00	0.00	EDU	0.00%	0	0	0.00
New Treatment Units (6 MGD)	0	0.00	0.00	EDU	0.00%	0	0	0.00
New Building (expandable to 10 MGD)	0	0.00	0.00	EDU	0.00%	0	0	0.00
Clearwell (10 MGD)	0	0.00	0.00	EDU	0.00%	0	0	0.00
Backwash Ponds	0	0.00	0.00	EDU	0.00%	0	0	0.00
Facility	0	0.00	0.00	EDU	0.00%	0	0	0.00
Electrical/Controls/Security	0	0.00	0.00	EDU	0.00%	0	0	0.00
Dam Connection & Intake	0	0.00	0.00	EDU	0.00%	0	0	0.00
Air backwash & In-Line valves	0	0.00	0.00	EDU	0.00%	0	0	0.00
Line Replacement - 2" Program	350,000	0.00	0.00	EDU	0.00%	0	0	0.00
1st & Sunset	345,000	0.00	0.00	EDU	0.00%	0	0	0.00
Juniper - 6th	300,000	0.00	0.00	EDU	0.00%	0	0	0.00
8th & Alder	310,000	0.00	0.00	EDU	0.00%	0	0	0.00
17th - 18th	324,000	0.00	0.00	EDU	0.00%	0	0	0.00
9th Avenue	303,000	0.00	0.00	EDU	0.00%	0	0	0.00
22nd - 23rd Avenue	440,000	0.00	0.00	EDU	0.00%	0	0	0.00
Reservoir Replacement - 1.5 Mill Gallon	0	0.00	0.00	EDU	0.00%	0	0	0.00
Total	\$2,372,000					\$0		0.00

Table 14
City of Sweet Home
Water SDC Study
Calculation of Improvement Fee Totals

Table 14: Calculation of Improvement Fee Totals		
System Component	Capacity Available for Growth	Improvement Fee Total
Source of Supply	79.46%	\$247,599
Raw Water Pumping Treatment	0.00%	0
Net Storage	79.46%	4,023,774
Transmission	20.78%	500,000
Pumping	0.00%	0
Distribution	0.00%	0
Direct Fire	0.00%	0
Meters & Services	0.00%	0
Treatment Train	100.00%	1,176,302
Exclude from SDC	0.00%	0
Total		\$5,947,675

Table 15
 City of Sweet Home
 Water SDC Study
 System Capacities for System Improvements

Table 15: System Capacities for System Improvements		
System Component	Additional Capacity from Improvements	Units
Source of Supply	3.0	MGD
Raw Water Pumping	0.0	MGD
Treatment	3.0	MGD
Net Storage	0.5	MG
Transmission	0.0	MGD
Pumping	0.0	MGD
Distribution	0.0	MGD
Direct Fire	0.0	EDU
Meters & Services	0.0	Eq. Mtr.
Treatment Train	1.5	MGD
Exclude from SDC	0.0	EDU

Table 16: Used and Unused Capacities of System Improvements				
System Component	Requirements per EDUs	Units	Unit Conversion	Additional EDUs Available
Source of Supply	26.3	Cubic Feet per Day	133,690	15,424
Raw Water Pumping	26.3	Cubic Feet per Day	133,690	0
Treatment	26.3	Cubic Feet per Day	133,690	15,424
Net Storage	69.0	Cubic Feet	133,690	968
Transmission	26.3	Cubic Feet per Day	133,690	0
Pumping	26.3	Cubic Feet per Day	133,690	0
Distribution	26.3	Cubic Feet per Day	133,690	0
Direct Fire	1.0	EDU	1	0
Meters & Services	1.0	Eq. Mtr.	1	0
Treatment Train	26.3	Cubic Feet per Day	133,690	7,799
Exclude from SDC	1.0	EDU	1	0

Table 17: Improvement Fee per EDUs	
System Component	Proposed Improvement SDC
Source of Supply	\$13
Raw Water Pumping	0
Treatment	207
Net Storage	107
Transmission	0
Pumping	0
Distribution	0
Direct Fire	0
Meters & Services	0
Treatment Train	151
Exclude from SDC	0
Total	----- \$478

Table 18: Proposed SDC by Meter Size

Meter Size	Reimbursement	Improvement	Total
3/4-Inch	\$737	\$478	\$1,215
1-Inch	1,561	1,013	2,574
1 1/2-Inch	5,861	3,804	9,665
2-Inch	11,142	7,232	18,374
3-Inch	20,649	13,403	34,052
4-Inch	33,398	21,679	55,076
6-Inch	54,384	35,301	89,685
8-Inch	97,806	63,487	161,293