

ORDINANCE NO. 2351

AN ORDINANCE amending Section 13.36.010 of the Camas Municipal Code by revising the rates for water service

THE COUNCIL OF THE CITY OF CAMAS DO ORDAIN AS FOLLOWS:

Section I

Section 13.86.010 of the Camas Municipal Code is amended to provide as follows:

13.86.010 - Monthly Service Charge and Rate for Water Service.

Meter Size	2003	2004	2005	2006	2007	2008
INSIDE CITY						
5/8"	\$ 4.01	\$ 5.70	\$ 5.70	\$ 6.07	\$ 6.43	\$ 6.43
3/4"	4.02	6.18	6.18	6.58	6.97	6.97
1.0"	4.04	7.62	7.62	8.12	8.60	8.60
1.25"	4.08	8.58	8.58	9.15	9.68	9.68
1.5"	4.10	9.54	9.54	10.17	10.77	10.77
2.0"	4.16	14.83	14.83	15.80	16.73	16.73
3.0"	4.32	53.77	53.77	57.29	60.65	60.65
4.0"	4.53	68.19	68.19	72.65	76.92	76.92
6.0"	5.08	101.84	101.84	108.50	114.88	114.88
8.0"	5.74	140.29	140.29	149.48	158.26	158.26
10.0"	6.50	183.55	183.55	195.57	207.06	207.06
OUTSIDE CITY						
5/8"	\$ 6.03	\$ 8.55	\$ 8.55	\$ 9.11	\$ 9.64	\$ 9.64
3/4"	6.05	9.27	9.27	9.88	10.46	10.46
1.0"	6.08	11.43	11.43	12.18	12.90	12.90
1.25"	6.12	12.87	12.87	13.72	14.52	14.52
1.5"	6.15	14.32	14.32	15.25	16.15	16.15
2.0"	6.25	22.25	22.25	23.70	25.10	25.10
3.0"	6.48	80.65	80.65	85.93	90.98	90.98
4.0"	6.81	102.28	102.28	108.98	115.38	115.38
6.0"	7.63	152.75	152.75	162.76	172.32	172.32
8.0"	8.61	210.44	210.44	224.22	237.38	237.38
10.0"	9.76	275.53	275.53	293.36	310.59	310.59

In addition to the foregoing monthly service charge all water used by customers shall be charged at the following rate per hundred cubic feet:

VOLUME CHARGE (\$/CCF)

INSIDE CITY

Residential	\$ 1.26	\$ 1.16	\$ 1.20	\$ 1.22	\$ 1.24	\$ 1.24
Commercial	1.68	1.35	1.40	1.45	1.50	1.50
Industrial	1.08	1.12	1.16	1.20	1.25	1.25
Cemetery	0.56	0.56	0.56	0.56	0.56	0.56
Irrigation	0.76	0.76	0.95	1.10	1.25	1.40

OUTSIDE CITY

Residential	\$ 1.88	\$ 1.74	\$ 1.80	\$ 1.83	\$ 1.86	\$ 1.86
Commercial	2.51	2.03	2.10	2.18	2.25	2.25
Industrial	1.63	1.68	1.74	1.80	1.88	1.88
Cemetery	n/a	0.84	0.84	0.84	0.84	0.84
Irrigation	1.14	1.14	1.43	1.65	1.88	2.10

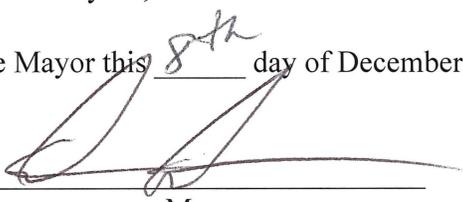
Section II

There shall be no increase in the rates charged for the Camas Cemetery Association and the Fern Prairie Cemetery Association, who shall continue to be billed at the rates effective in 2003.

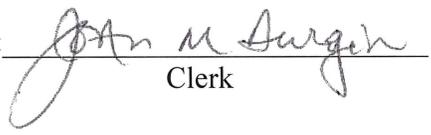
Section III

This ordinance shall take force and be in effect January 16, 2004.

PASSED by the Council and APPROVED by the Mayor this 8th day of December, 2003.

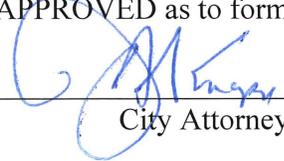
SIGNED: 

Mayor

ATTEST: 

Clerk

APPROVED as to form:



City Attorney

**City of Camas, WA
Utility Rate Study**

Summary Report

December 22, 2003



FINANCIAL CONSULTING SOLUTIONS GROUP, INC.



December 22, 2003

Mr. Monte Brachmann
 Public Works Director
 City of Camas
 616 NE Fourth Avenue
 Camas, WA 98607

Subject: Utility Rate Study – Summary of Findings

Dear Mr. Brachmann:

Financial Consulting Solutions Group, Inc. (FCS Group) is pleased to provide this summary report of the findings of the Utility Rate Study performed for the water, sewer, and sanitation utilities. The study addressed system development charges (SDCs) for water and sewer, analysis of the revenue requirements for each utility for a five-year period, and an evaluation of the cost of service and rate structures. The City Council adopted the proposed rates and charges summarized below on December 8, 2003. The basis for the adopted rates is summarized in the body of this document. The detailed spreadsheets supporting the results have been provided to the City as a separate technical appendix.

System Development Charges

The adopted SDCs for the water and sewer utilities reflect the existing utility facilities as of 12/31/02 and the planned capital improvements defined in the City's draft Capital Facilities Plan.

METER SIZE	EQUIVALENT METER FACTORS	Water Utility				
		Residential	Commercial	Industrial	Irrigation	Cemetery
5/8"	1.0	\$ 1,714	\$ 1,673	\$ 9,987	\$ 3,263	\$ 1,276
3/4"	1.5	2,317	2,182	13,984	4,790	1,809
1"	2.5	3,549	3,224	22,004	7,871	2,902
1.5"	5.0	6,539	5,738	41,964	11,676	4,222
2.0"	8.0	10,288	8,917	66,078	15,481	5,543
3.0"	16.0	21,632	18,741	131,729	24,775	8,874
4.0"	25.0		28,198	203,992	50,907	19,104
6.0"	50.0		54,122	404,375	78,711	29,019
8.0"	80.0		85,127	644,731	155,596	56,212

METER SIZE	EQUIVALENT METER FACTORS	Sewer Utility
Residential		
All	All	\$ 2,349
Commercial		
5/8"	1.0	\$ 2,349
3/4"	1.5	3,523
1"	2.5	5,872
1.5"	5.0	11,745
2.0"	8.0	18,792
3.0"	16.0	37,584
4.0"	25.0	58,725
6.0"	50.0	117,449
8.0"	80.0	187,919

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 GROUP, INC

Water Rates

The adopted water rates phase-in the cost of service results, generating sufficient revenues to finance the planned water capital improvements through 2008, assuming issuance of \$9.8 million in revenue bonds. The increases in irrigation rates reflect the peak period demands placed on the system by this class.

MONTHLY SERVICE CHARGE						
	Meter Size					
		2004	2005	2006	2007	2008
INSIDE CITY	5/8"	\$ 5.70	\$ 5.70	\$ 6.07	\$ 6.43	\$ 6.43
	3/4"	6.18	6.18	6.58	6.97	6.97
	1.0"	7.62	7.62	8.12	8.60	8.60
	1.25"	8.58	8.58	9.15	9.68	9.68
	1.5"	9.54	9.54	10.17	10.77	10.77
	2.0"	14.83	14.83	15.80	16.73	16.73
	3.0"	53.77	53.77	57.29	60.65	60.65
	4.0"	68.19	68.19	72.65	76.92	76.92
	6.0"	101.84	101.84	108.50	114.88	114.88
	8.0"	140.29	140.29	149.48	158.26	158.26
10.0"	183.55	183.55	195.57	207.06	207.06	
OUTSIDE CITY	5/8"	\$ 8.55	\$ 8.55	\$ 9.11	\$ 9.64	\$ 9.64
	3/4"	9.27	9.27	9.88	10.46	10.46
	1.0"	11.43	11.43	12.18	12.90	12.90
	1.25"	12.87	12.87	13.72	14.52	14.52
	1.5"	14.32	14.32	15.25	16.15	16.15
	2.0"	22.25	22.25	23.70	25.10	25.10
	3.0"	80.65	80.65	85.93	90.98	90.98
	4.0"	102.28	102.28	108.98	115.38	115.38
	6.0"	152.75	152.75	162.76	172.32	172.32
	8.0"	210.44	210.44	224.22	237.38	237.38
10.0"	275.33	275.33	293.36	310.59	310.59	

VOLUME CHARGE (\$/ccf)						
	Customer Class					
		2004	2005	2006	2007	2008
INSIDE CITY	Residential	\$ 1.16	\$ 1.20	\$ 1.22	\$ 1.24	\$ 1.24
	Commercial	1.35	1.40	1.45	1.50	1.50
	Industrial	1.12	1.16	1.20	1.25	1.25
	Cemetery	0.56	0.56	0.56	0.56	0.56
	Irrigation	0.76	0.95	1.10	1.25	1.40
OUTSIDE CITY	Residential	\$ 1.74	\$ 1.80	\$ 1.83	\$ 1.86	\$ 1.86
	Commercial	2.03	2.10	2.18	2.25	2.25
	Industrial	1.68	1.74	1.80	1.88	1.88
	Cemetery	0.84	0.84	0.84	0.84	0.84
	Irrigation	1.14	1.43	1.65	1.88	2.10

Sewer Rates

The sewer rate increases for 2004 were previously adopted by the City Council. The projected rates reflect a simplification to the City's rate structure and a minor cost of service shift between the residential and non-residential classes. The increases assume that the City issues \$4.0 million in revenue bonds in the latter part of the projection period to finance major capital improvements.

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Residential						
	Customer Class					
		2004*	2005	2006	2007	2008
INSIDE CITY	Monthly Service Charge	\$ 22.25	\$ 22.60	\$ 23.05	\$ 23.55	\$ 24.05
OUTSIDE CITY	Monthly Service Charge	\$ 33.38	\$ 33.90	\$ 34.58	\$ 35.33	\$ 36.08

Commercial & Industrial						
	Customer Class					
		2004*	2005	2006	2007	2008
INSIDE CITY	Monthly Service Charge	\$ 4.65	\$ 5.00	\$ 5.25	\$ 5.50	\$ 5.75
	Volume Charge (\$/ccf)	2.15	2.25	2.30	2.35	2.45
OUTSIDE CITY	Monthly Service Charge	\$ 6.98	\$ 7.50	\$ 7.88	\$ 8.25	\$ 8.63
	Volume Charge (\$/ccf)	3.23	3.38	3.45	3.53	3.68

* Previously Adopted 2004 Rates



Sanitation Rates

The sanitation rates implement a required rate increase through selected adjustments to specific rate elements, based on the cost of service results. Note that the Dumpster rate table in the ordinance reflects the figures below minus the rental charges, which are shown separately in the rate ordinance.

1.5 Yard Dumpster		
# of Empties/Week	Regular Dumpsters	Compacted Dumpsters
1	\$ 78.70	\$ 149.66
2	149.66	297.24
3	223.45	444.81
4	297.24	592.39
5	371.02	739.97

2 Yard Dumpster		
# of Empties/Week	Regular Dumpsters	Compacted Dumpsters
1	\$ 105.47	\$ 194.74
2	194.74	373.28
3	284.01	551.82
4	373.28	730.36
5	462.55	908.90

Regular Monthly Service	
Customer Class	Monthly Charge
Minican (35 gal EOW)	\$ 9.25
1-35 gal Can	14.12
1-65 gal Can	18.95
1-95 gal Can	25.70

Stormwater Policy Evaluation

In addition to the rate analyses, FCS Group also prepared two issue papers to assist the City in their deliberations on whether to implement a monthly charge for stormwater operations and maintenance. The City Council is currently considering this option, and if the decision is to implement a monthly charge, a separate rate analysis will be undertaken.

We appreciate the support and hard work by City of Camas management and staff and hope that we may be of service to the City in the future. If you have any questions, please call me at (425) 867-1802.

Very truly yours,

Tracey P. Dunlap
 Principal

Beth Jacobs
 Consultant

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City of Camas, WA Utility Rate Study

Summary Report

December 22, 2003

Prepared by



Financial Consulting Solutions Group, Inc.
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City of Camas Utility Rate Study Summary Report

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I – INTRODUCTION

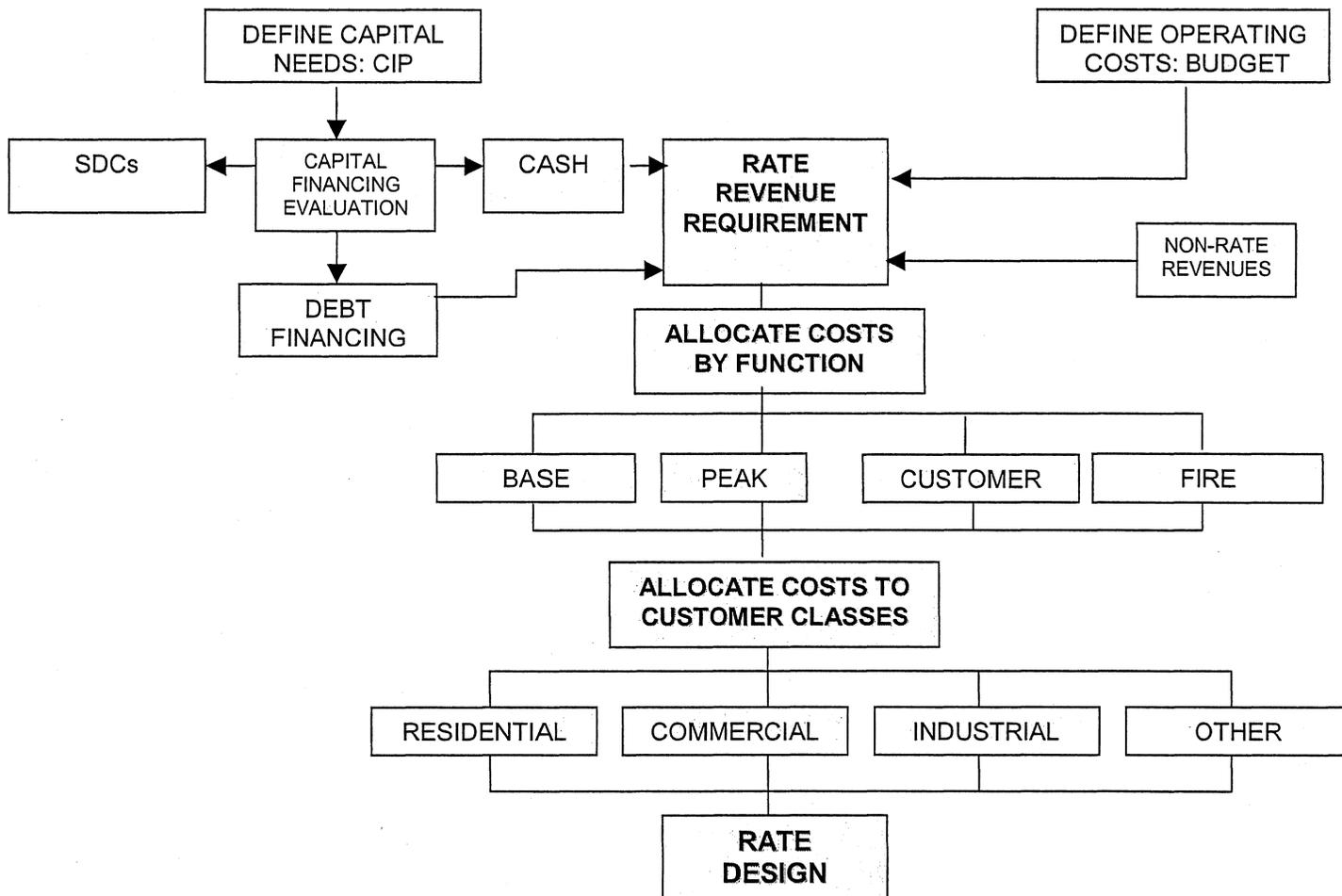
In July 2003, the City of Camas (City) engaged Financial Consulting Solutions Group, Inc. (FCS Group) to perform a utility rate study for the City's water, sewer, and sanitation utilities. The study included analyses of revenue requirements, cost allocations, customer classification, and system development charges. More specifically, the major objectives established for the study were to:

- a. Develop equitable and defensible system development charges for the water and sewer utilities to be imposed on new development as a buy-in to the existing utility system and an equitable share of capacity-enhancing, future capital project costs.
- b. Develop an analysis and a forecast of utility revenue needs for each utility, projecting revenues and expenditures over a five-year period.
- c. Develop cost of service analyses that identify each utility's costs as they relate to various components of system demand. These allocated costs are then distributed among the customer classes based on each class' demands in the water and sewer utilities. Note that the Sanitation utility cost allocations are made based on size and type of container used.
- d. Develop a rate schedule that phases-in the differences between the current rates and the calculated 2008 cost of service rates to transition shifts in cost of service between the customer classes.
- e. Review study findings with Public Works, Finance, and the City Council and document and present findings in clear, understandable terms.

In addition to these tasks, FCS Group prepared two issue papers to assist the City Council in their consideration of implementing separate stormwater utility monthly rates. These issue papers, identifying policy and implementation considerations, were presented to the City Council on October 6, 2003 and are included in Appendix A of this report.

Working closely with FCS Group, City staff collected data, made policy recommendations, and crosschecked the analyses. FCS Group followed the basic methodology shown in Exhibit 1 on the following page. The general methodology for each of the study steps is described in detail in Chapter II. The findings and conclusions of the rate study for all three utilities are summarized in Chapter III. The City Council adopted the proposed rates and charges summarized in this report on December 8, 2003. The detailed spreadsheets supporting the results have been provided to the City as a separate technical appendix.

Exhibit 1: Rate Study Methodology



II – METHODOLOGY

A. System Development Charges

1. Overview

The term System Development Charge (SDC) (also called “connection charges” or “general facilities charges” as provided for by RCW 35.92.025) refers to the fee or charge imposed on a new customer as a condition of connection to the utility system. Collection of the SDC promotes equity between new and existing customers while providing a source of cash flow to fund capital projects. Equity is served by providing a vehicle for new customers to share in the capital costs incurred to support their addition to the system. To establish equity, an SDC should recover a proportionate share of the existing and future plant-in-service costs from a new customer. In essence, from a financial perspective, a new customer should become financially equivalent to an existing customer by paying the SDC.

There are several ways to calculate an SDC. The basic formula divides the allocable costs by the customer base. The allocable costs and corresponding customer base can be defined in several different ways, but a basic SDC formula would appear as follows:

$$\text{SYSTEM DEVELOPMENT CHARGE} = \frac{\text{Allocable Capital Cost}}{\text{Customer Base}}$$

The SDC calculation is influenced greatly by the definition of “allocable costs” and “customer base”. The choice of the costs the City targets for recovery and the customer base from which they are targeted has a large impact on the resulting SDC.

2. Recommended Approach

FCS Group developed SDCs under an average cost basis methodology. Under this method, customers pay for a share of the existing system plus their allocated share of the utility’s planned capital projects.

Calculating SDCs on an average cost basis incorporates the future capital projects through 2016 listed in the City’s Capital Facilities Plan (CFP), with revisions indicated by City staff, except those identified as developer funded (external source) or repair and replacement (assumed to be funded by rates). The future costs are added to the existing costs, with the total divided by all customers served by the facilities (existing and new growth), as expressed below.

$$\text{SDC} = \frac{\text{Existing Cost Basis} + \text{Future Cost Basis}}{\text{Current \& Future Customer Demands}}$$

This method recognizes that, in general, the cost of future facilities is higher than that of existing plant and that all facilities include components that serve both existing and future customers.

This average cost approach considers the costs of the system as a whole, serving all planned customers.

3. *SDC Cost Basis*

The SDC cost basis is summarized as follows:

Existing Facility Costs

- Existing Plant-in-Service at original cost, as reported in the City's financial records as of December 31, 2002.
- Deduct contributions-in-aid-of-construction (CIAC) to recognize that these are costs that have not been borne by the ratepayer. CIAC includes developer-donated facilities, and federal and state grants. An adjustment has been made to include the SDC portion of CIAC in the charge basis to recognize that SDCs represent payments made by existing ratepayers as a condition of connection.
- Add accumulated interest on non-contributed existing plant-in-service based on the age of each asset, as provided for in RCW 35.92.025. Note that the statute limits the period during which interest can be accumulated to a ten year maximum.
- This calculation does not deduct accumulated depreciation.

Future Facilities Costs

- Capital improvements costs through 2016 are included based on the City's Capital Facilities Plan.
- Execution of the City's CFP for water is contingent on growth assumptions provided in the 2001 Water System Plan. The number of future connections to the system considered in the SDC includes customer growth from 2003-2027 for the water utility and 2003-2024 for the sewer utility.
- Capital projects designated as "Improvements" or "Expansions" have been included in the analysis as future facilities. "Repair and Replacement" projects are assumed to be funded entirely through rates. "Developer Funded" projects are excluded since they represent costs that will not be paid by the utility.

The results for each utility are discussed in Chapter III. This recommended approach differs from the City's prior SDC calculation in four major assumptions:

- **Eliminate Deduction for Debt** The deduction of outstanding debt principal in the prior calculation was eliminated to recognize that one of the intended uses of SDC proceeds is to pay debt service on bonds used to finance capital projects.
- **Addition of Accumulated Interest** RCW 35.92.025, when describing an equitable share of system costs, allows for the inclusion of interest costs on the existing system accumulated for up to ten years at a rate consistent with that which was applicable during the time of construction.

- **Capacity for System Versus by Individual Component** The City's current SDC calculation was based on an engineering assessment of available system capacity by component. The recommended approach uses available system capacity based on growth served by projected improvements.
- **Elimination of B&O Tax Calculation** The SDC calculation in the City's 1997 Cost of Service Study includes a 1.829% State B&O tax. The B&O Tax is a tax on gross revenues, not on the transaction itself, and should therefore be paid from utility revenues.

In addition to these changes, several structural changes were implemented to simplify the structure and increase consistency between the water and sewer charges. The specific changes are described with the resulting charges in Chapter III. Note that the City does not charge a system development charge for sanitation, which is consistent with general practice, and therefore no SDC is calculated for that utility.

B. Revenue Requirements

1. Approach

The revenue requirements analysis determines the amount of annual revenue that needs to be generated by service rates. In other words, it determines the total revenue required from rates to meet projected utility needs. The requirements incorporate the annual operating budget along with the capital and financial policy needs, including:

- Formal and informal planned methods for financing capital improvements;
- System development charge levels and use and application policy;
- Fiscal policies related to operating reserve levels;
- Fiscal policies related to bond coverage and bond ratings.

The analysis determines the amount of revenue needed in a given year to meet that year's expected financial obligations. At least two separate conditions must be satisfied for rates to be sufficient: cash needs for that year must be met and the revenue bond coverage requirement must be realized. Each utility's revenue requirement is calculated individually.

The cash flow test identifies all the known cash requirements for the utility in each year of the study period. Cash requirements include operating and maintenance expenses, debt service, directly funded capital outlays, and any reserve balance adjustments. The total annual cash needs of the utility are then compared to projected cash revenues. Shortfalls are identified and the level of rate increases necessary to offset the shortfall is estimated.

The coverage test recognizes the primary cash needs of the enterprise and the need to meet coverage requirements associated with revenue bonds. Coverage over and above the debt service payment is a requirement of revenue bonds and some other long-term debt issuance, and acts as a cushion for the bondholders against poor performance. Coverage is expressed as a multiplier. For example, 1.0 coverage would imply that no additional cushion is required. 1.4 coverage

means revenues must be sufficient to pay operating expenses (excluding depreciation), annual revenue bond debt service, plus an additional 40% of debt service. While the City of Camas' coverage requirement is for the combined utilities, the analysis treats each utility separately to ensure that each service supports its own debt requirements.

If a rate revenue deficiency exists under both tests, the analysis adds the greatest deficiency to the forecasted rate revenue. The result, adjusted for taxes, is the total rate revenue requirement for any given year. The analysis uses this rate revenue requirement to indicate annual revenue increases and to drive the cost-of-service analysis.

2. *Fiscal Policy Assumptions*

For general guidance concerning fiscal policies while conducting this study, FCS Group consulted with City staff and referenced the Capital Facilities Plan (Draft) dated June 10, 2003. The key fiscal policy assumptions are summarized below.

- Water, sewer, and sanitation are treated as entirely separate utilities for analysis purposes.
- Separate operating, capital, and bond reserve accounts are modeled for each utility.
- Minimum operating account balances are set at 60 days of operations and maintenance (O&M) costs. These reserves are typically designed to provide a liquidity "cushion" which can be used to cover significant cash balance fluctuations, such as unanticipated cash operating expenses. Balances in excess of the minimum required amount in the operating reserve are assumed to be transferred to the capital reserve at year's end and become restricted for capital use in subsequent years.
- Minimum Capital Account balances are set at 2% of utility plant as contingency against unplanned expenditures.
- Debt service coverage is calculated for each utility separately (including SDCs), even though the actual requirements are for the combined utility fund. Note that the sanitation utility does not have any revenue bond debt.
- Debt is used to fund capital projects based on need, with the objective of moderating rate impacts of major projects.
- The City of Camas funds repair and replacement (R&R) as part of the Capital Improvement Plan and therefore, no explicit R&R reserve funding level has been established.

C. **Cost of Service and Rate Design**

The cost of service analyses are a two-step process intended to provide the analytical basis for recovering the forecasted revenue requirements from classes of customers according to the demand they place on the system(s). First, capital and O&M costs are allocated to applicable functional categories. Then, based on customer class demand and capacity characteristics, functional costs are distributed to customer classes.

The allocation of the operating portion of the revenue requirement was based on an allocation of expenses. In general, functional cost allocation was based on known or assumed cost

“causation”. For example, customer billing costs are allocated to the “customer” category. The allocation of the capital portion of the revenue requirement was based on allocation of “plant-in-service” or the capital improvement plan. The allocations for the plant-in-service utilize engineering planning criteria from both the City and industry standards.

The functional cost allocation process results in a pool of costs for each functional category. From these cost pools, unit costs are created that form the building blocks for designing rate structures that recognize the demands of each customer class to enhance rate equity. Using statistics from the City’s utility billing system, relevant planning criteria, and engineering data, the analysis allocates these costs to each customer class. As a result, costs will be recovered from customer classes based on their demand by functional category. If one customer class places a higher proportional demand in one functional category, that customer class should pay a higher portion of that functional category’s cost. Rate structures can be generated based on these results and can also be designed to further support policy objectives, such as promoting conservation, increasing rate revenue stability, etc.

The results of this study element are summarized for each utility in Section III.

III – STUDY FINDINGS AND RECOMMENDATIONS

A. System Development Charges

1. Water Utility

a. Residential

The current Residential water SDC is \$1,010 for a 5/8” meter, increasing by meter size as shown in Exhibit 2. The increase reflects the City’s level of actual and planned capital investment to expand the capacity of the system. The single family and multifamily distinction has been eliminated for consistency with the rate structure.

Exhibit 2: Residential Water SDC

METER SIZE	EQUIVALENT METER FACTORS	RESIDENTIAL		
		Current	Proposed	Increase (Decrease)
5/8"	1.0	\$ 1,010	\$ 1,714	\$ 704
3/4"	1.5	1,515	2,317	802
1"	2.5	2,525	3,549	1,024
1.5"	5.0	5,050	6,539	1,489
2.0"	8.0	8,080	10,288	2,208
3.0"	16.0	16,160	21,632	5,472

Note on Residential Fire Sprinkler Requirements

There was substantial policy discussion regarding whether, for homes requiring a larger meter size for fire sprinkler purposes only, the higher SDC for the larger meter should be charged or the standard meter charge without fire sprinklers should apply. To encourage the use of fire sprinklers, the City Council adopted the following approach: For houses on parcels of less than or equal to 10,000 square feet, no increase in the SDC will be charged when a residential fire sprinkler system is required and the meter only needs to be up-sized for operation of the sprinkler system. The reduction of the increased SDC on lots between 10,001 and 15,000 square feet shall require the approval of the Public Works Director.

b. Commercial

The current Commercial water SDC is \$1,415 for a 5/8” meter, increasing by meter size as shown in Exhibit 3. One of the changes from the City’s prior methodology is that the water differentials by meter size are based on a variety of demand factors. For example, meter and service costs are allocated based on the meter and service factors published by the American Water Works Association, while peaking demands are allocated based on meter capacity equivalents. The use of a variety of allocation factors accounts for the decrease in the differential for larger meter sizes. In addition to the proposed changes in amount, the City,

Commercial, and Residential/Commercial classes have been combined into a single Commercial class.

Exhibit 3: Commercial Water SDC

METER SIZE	EQUIVALENT METER FACTORS	COMMERCIAL		
		Current	Proposed	Increase (Decrease)
5/8"	1.0	\$ 1,415	\$ 1,673	\$ 258
3/4"	1.5	2,123	2,182	59
1"	2.5	3,538	3,224	(314)
1.5"	5.0	7,075	5,738	(1,337)
2.0"	8.0	11,320	8,917	(2,403)
3.0"	16.0	22,640	18,741	(3,899)
4.0"	25.0	35,375	28,198	(7,177)
6.0"	50.0	70,750	54,122	(16,628)
8.0"	80.0	113,200	85,127	(28,073)

c. Industrial

The current Industrial water SDC is \$7,101 for a 5/8" meter, increasing by meter size as shown in Exhibit 4. The substantial increase in SDC charges for all meter sizes is due to the higher fire protection requirements of the industrial class and their high share of base costs.

Exhibit 4: Industrial Water SDC

METER SIZE	EQUIVALENT METER FACTORS	INDUSTRIAL		
		Current	Proposed	Increase (Decrease)
5/8"	1.0	\$ 7,101	\$ 9,987	\$ 2,886
3/4"	1.5	10,652	13,984	3,332
1"	2.5	17,753	22,004	4,251
1.5"	5.0	35,505	41,964	6,459
2.0"	8.0	56,808	66,078	9,270
3.0"	16.0	113,616	131,729	18,113
4.0"	25.0	177,525	203,992	26,467
6.0"	50.0	355,050	404,375	49,325
8.0"	80.0	568,080	644,731	76,651

d. Cemetery and Irrigation

Prior to this study, the City did not have SDCs for either Cemetery or Irrigation customers. Based on a desire to encourage water conservation, SDCs for these classes were calculated and adopted. The relatively higher charges for irrigation reflect their disproportionate contribution to peak period demands. As irrigation users by definition, Cemetery and Irrigation customers do not receive the fire protection component common to the other customer classes. Results are presented below in Exhibit 5.

Exhibit 5: Cemetery & Irrigation Water SDCs

METER SIZE	EQUIVALENT METER FACTORS	CEMETERY	IRRIGATION
		Proposed	Proposed
5/8"	1.0	\$ 1,276	\$ 3,263
3/4"	1.5	1,809	4,790
1"	2.5	2,902	7,871
1.5"	5.0	4,222	11,676
2.0"	8.0	5,543	15,481
3.0"	16.0	8,874	24,775
4.0"	25.0	19,104	50,907
6.0"	50.0	29,019	78,711
8.0"	80.0	56,212	155,596

2. Sewer Utility

a. Residential

The current sewer SDC is \$2,034 per single-family residence as shown in Exhibit 6. The increase in SDC can be attributed to the actual and planned capital improvements to the sewer system. The single family and multifamily distinction has been eliminated for consistency with the rate structure.

Exhibit 6: Residential Sewer SDC

Customer Class	System Development Charges		
	Current	Proposed	Increase (Decrease)
Residential	\$ 2,034	\$ 2,349	\$ 315

b. Commercial

The City's current sewer SDC uses a 3/4" meter as the standard meter size for application of the capacity factors. For consistency with the water SDC and to recognize that there are commercial 5/8"x 3/4" meters, the proposed Commercial sewer SDC structure applies the 5/8"x 3/4" meter size as basis for capacity factors. This results in an increase in the SDC for the larger meter sizes. In addition, the revised charges combine City, Commercial, and Residential/Commercial classes into the Commercial class. Exhibit 7 presents the current and revised sewer SDC for Commercial.

Exhibit 7: Commercial Sewer SDC

METER SIZE	Sewer SDC - Commercial		
	Current	Proposed	Increase (Decrease)
5/8"		\$ 2,349	n/a
3/4"	2,034	3,523	1,489
1"	3,397	5,872	2,475
1.5"	6,773	11,745	4,972
2.0"	10,841	18,792	7,951
3.0"	21,703	37,584	15,881
4.0"		58,725	n/a
6.0"		117,449	n/a
8.0"		187,919	n/a

Note that the current ordinance has a separate Commercial II class that applies a cost per constituent characteristic (strength, usage, etc.) for application to unusual industrial requirements. The recommended charges expand the application of the meter-based structure to larger meter sizes and contemplates that unusual customer requirements will be dealt with on a case-by-case basis by the City Public Works Director.

3. Combined Impacts and Comparisons

To provide context for evaluating the impacts of the water and sewer SDC changes, Exhibit 8 was created to show the combined charges for common residential and commercial meter sizes.

Exhibit 8: Combined SDC impacts

	Meter Size	Current			Proposed			% Difference
		Water	Sewer	TOTAL	Water	Sewer	TOTAL	
RESIDENTIAL	5/8"	\$ 1,010	\$ 2,034	\$ 3,044	\$ 1,714	\$ 2,349	\$ 4,063	33.47%
	3/4"	1,515	2,034	3,549	2,317	2,349	4,666	31.47%
	1"	2,525	2,034	4,559	3,549	2,349	5,898	29.38%
COMMERCIAL	5/8"	\$ 1,415	\$ 2,034	\$ 3,449	\$ 1,673	\$ 2,349	\$ 4,022	16.63%
	3/4"	2,123	2,034	4,157	2,182	3,523	5,705	37.24%
	1"	3,538	3,397	6,935	3,224	5,872	9,096	31.16%
	1.5"	7,075	6,773	13,848	5,738	11,745	17,483	26.25%
	2"	11,320	10,841	22,161	8,917	18,792	27,708	25.03%
	3"	22,640	21,703	44,343	18,741	37,584	56,324	27.02%
	4"	35,375	33,900	69,275	28,198	58,725	86,923	25.48%
	6"	70,750	67,800	138,550	54,122	117,449	171,572	23.83%
8"	113,200	108,480	221,680	85,127	187,919	273,046	23.17%	

As further comparison, the water and sewer SDCs of surrounding and/or comparable jurisdictions is provided in Exhibit 9.

Exhibit 9: SDC Comparisons (Residential 5/8" Meter)

Agency	Water	Sewer	Total
Camas - Current	\$ 1,010	\$ 2,034	\$ 3,044
Camas - Proposed	\$ 1,714	\$ 2,418	\$ 4,132
Battle Ground	\$ 1,174	\$ 5,939	\$ 7,113
Gresham, Oregon	\$ 2,200	\$ 1,900	\$ 4,100
Hazel Dell Sewer District	N/A	\$ 5,769	\$ 5,769
Kelso	\$ 1,200	\$ 3,157	\$ 4,357
Vancouver	\$ 1,716	\$ 1,999	\$ 3,715
Washougal - Zone 1	\$ 1,800	\$ 2,300	\$ 4,100
Washougal - Zone 2	\$ 2,095	\$ 2,300	\$ 4,395

As mentioned in the SDC Methodology in Chapter II, the City does not charge a system development charge for sanitation, which is consistent with general practice, and therefore no SDC is calculated for that utility.

The detailed spreadsheets supporting the SDC calculation are contained in Technical Appendix A of the separate Technical Appendix document.

B. Water Utility

1. Revenue Requirements

a. Assumptions

Based on the methodology described in the previous chapter, FCS Group projected Camas's water revenue requirements for the years 2003 through 2008, under the following general assumptions:

- Expenditures are based on 2003 estimates, adjusted for known changes and escalated for future years; salaries and benefits are based on annualized actuals through June and insurance reflects the actual for the year.
- Expenditures for 2004-2009 reflect adjustments to recognize changes in timing for major one-time professional services contracts and 2004 budgeted interfund service charges.
- Most expenditures have been escalated by general cost inflation (assumed at 3% annually), with Office & Operating Supplies, Fuel costs, and Public Utility costs escalated by general cost inflation plus growth.
- Revenues are based on 2002 actual results, adjusted for growth and adopted rate increases. Rate revenue (before calculated increase) for 2004 is calculated by applying the 2002 rates to projected 2004 water usage by customer class. Growth projections are based on Comprehensive Plan Phase I growth rates by customer class.

Wafertech flows are assumed to grow on a linear basis from the 2002 actual of 0.58 mgd to 0.70 mgd (Phase I flow) in 2007.

- Combined cash balances have been split evenly between the water and sewer utilities. A transfer of \$1,000,000 from the operating fund to the capital fund in 2003 was assumed for modeling purposes. After the transfer, the operating fund beginning balance was assumed at \$0.35 million; the capital fund beginning balance was \$1.58 million.
- Capital projects are based on the Capital Facilities Plan, with minor adjustments to smooth impacts. Debt is used to fund capital projects based on need.
- Existing debt service has been allocated between water and sewer utilities based on the percentages provided by the City.
- To be conservative, projected SDC revenues are based on the current SDC multiplied by additional connections to the system, calculated by customer class. Any additional revenues can be used to reduce projected borrowing.

b. Capital Funding

The City has projected approximately \$10.9 million (current dollars) in water capital projects in the next five year period (2004-2008). These capital projects will be primarily financed with existing reserves, system development charges, and revenue bond proceeds. Given the level of planned capital projects and available sources, it is anticipated that the Utility will debt finance to generate proceeds estimated at \$9.79 million between 2004 and 2008, as follows:

- \$2,270,000 in 2004
- \$3,610,000 in 2005
- \$1,980,000 in 2006
- \$1,930,000 in 2007

Exhibit 10 summarizes the projected capital sources and uses for the projection period.

Exhibit 10: Summary of Capital Funding

WATER UTILITY Summary of Capital Funding	2003	2004	2005	2006	2007	2008
PROJECT COSTS						
Improvement Upgrades	\$ 365,409	\$ 551,200	\$ 1,653,496	\$ 1,220,196	\$ 392,751	\$ 126,532
Expansions	526,000	1,086,800	2,775,656	1,081,838	1,839,222	60,833
Repairs & Replacements	<u>1,075,883</u>	<u>826,800</u>	<u>81,120</u>	<u>84,365</u>	<u>87,739</u>	<u>91,249</u>
TOTAL PROJECT COSTS	\$ 1,967,292	\$ 2,464,800	\$ 4,510,272	\$ 2,386,399	\$ 2,319,713	\$ 278,614
SOURCES OF FUNDING						
Developer Contributions	\$ 268,000	\$ -	\$ -	\$ -	\$ -	\$ -
Grants	19,533	-	-	-	-	-
System Development Charges	330,350	328,575	328,575	328,575	328,575	353,440
Interfund Loan Proceeds	101,908	101,508	101,108	100,708	77,308	-
Cash Balances	1,247,501	-	470,589	-	-	-
New Debt Proceeds	-	<u>2,270,000</u>	<u>3,610,000</u>	<u>1,980,000</u>	<u>1,930,000</u>	-
TOTAL SOURCES OF FUNDING	\$ 1,967,292	\$ 2,700,083	\$ 4,510,272	\$ 2,409,283	\$ 2,335,883	\$ 353,440
<i>Total New Debt Issued</i>	\$ -	\$ 2,522,902	\$ 4,043,389	\$ 2,217,704	\$ 2,161,701	\$ -

c. Results

The water utility's revenue requirements are driven by the cash needs of the utility, and the minimum debt coverage ratio requirement is satisfied under the projected increases. Projected revenues, expenses, and the required level of rate revenue, as well as required overall percentage increase in rates, are summarized in Exhibit 11.

Exhibit 11: Water Utility Revenue Requirements

Summary of Revenue Requirements		2003	2004	2005	2006	2007	2008
SOURCES							
Rate Revenues Before Increase		\$ 2,162,288	\$ 2,260,515	\$ 2,358,742	\$ 2,456,969	\$ 2,555,196	\$ 2,659,832
Fire Protection (Public & Private)		28,300	28,300	28,300	28,300	28,300	28,300
Interest Earnings		11,911	21,235	50,568	44,553	52,824	60,919
Other Revenues		<u>92,950</u>	<u>94,767</u>	<u>96,584</u>	<u>98,401</u>	<u>100,218</u>	<u>102,154</u>
TOTAL SOURCES		\$ 2,295,449	\$ 2,404,817	\$ 2,534,194	\$ 2,628,223	\$ 2,736,538	\$ 2,851,205
USES							
Functional							
Taxes		\$ 116,514	\$ 121,455	\$ 126,422	\$ 131,389	\$ 136,356	\$ 142,020
Source of Supply		97,219	294,771	102,749	106,125	109,610	113,229
Pumping		280,834	298,304	316,557	335,626	355,542	377,000
Treatment		279,943	345,541	313,659	331,082	349,259	368,773
Transmission & Distribution		281,874	337,302	303,108	314,605	326,516	339,022
Services		109,710	113,115	116,625	120,244	123,975	127,830
Meters		172,729	178,820	185,119	191,634	198,372	205,407
Administration/Interfund/Customer Service		<u>362,420</u>	<u>454,592</u>	<u>409,566</u>	<u>424,771</u>	<u>440,516</u>	<u>457,021</u>
Total Functional Uses		\$ 1,701,244	\$ 2,143,899	\$ 1,873,804	\$ 1,955,475	\$ 2,040,146	\$ 2,130,302
Debt Service							
Existing		\$ 128,005	\$ 131,794	\$ 149,127	\$ 148,715	\$ 149,937	\$ 119,037
New		-	<u>202,444</u>	<u>554,965</u>	<u>748,315</u>	<u>936,782</u>	<u>936,782</u>
Total Debt Service		\$ 128,005	\$ 334,238	\$ 704,092	\$ 897,030	\$ 1,086,719	\$ 1,055,819
Additions to Reserve		\$ -	\$ -	\$ -	\$ 13,425	\$ 13,919	\$ 14,820
TOTAL USES		\$ 1,829,249	\$ 2,478,137	\$ 2,577,897	\$ 2,865,930	\$ 3,140,783	\$ 3,200,941
INCREASE CALCULATION							
Rate Revenue Including Previous Increases		\$ 2,162,288	\$ 2,260,515	\$ 2,439,299	\$ 2,540,881	\$ 2,815,497	\$ 3,102,913
Total Annual Revenue Deficiency*		-	<u>77,202</u>	-	<u>166,382</u>	<u>165,350</u>	-
RATE REVENUE AFTER INCREASES		\$ 2,162,288	\$ 2,337,717	\$ 2,439,299	\$ 2,707,263	\$ 2,980,847	\$ 3,102,913
Annual Rate Increase		0.00%	3.42%	0.00%	6.55%	5.87%	0.00%
Cumulative Rate Increase		0.00%	3.42%	3.42%	10.19%	16.66%	16.66%

*After Excise Tax adjustment

Rate revenues are required to increase moderately in 2004 (3.42%), and more substantially in 2006 (6.55%) and 2007 (5.87%). Increases are required in these particular years to enable the City to keep up with the rise in operating expenses, as well as servicing the debt. The 2004 costs include the following major professional services studies in 2004:

- \$100,000 for a Watershed Management Assessment in Source of Supply
- \$95,000 in Water Rights Application/Exploration
- \$50,000 Vulnerability Study in Admin/General.

As noted in the assumptions, projected consumption for Wafertech Phase One increases from 0.58 mgd in 2002 to 0.70 mgd in 2007 and remains at that level thereafter. If this increase in usage does not materialize, the timing of the capital expenditures would be adjusted accordingly.

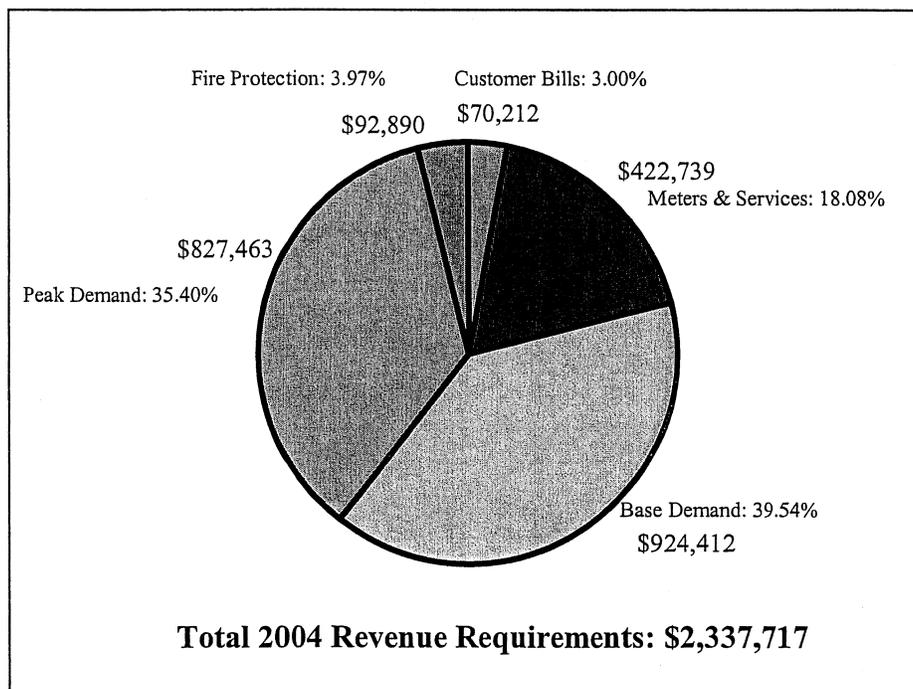
2. Cost of Service and Rate Design

In conducting the cost of service analysis, FCS Group followed the general methodology described in Chapter II. As a first step, water utility plant and annual expenses were allocated to the following five functional cost categories:

- **Customer:** Estimated costs associated with serving customers regardless of the level of water they use, such as billing and office support, are included in this category. These costs are typically associated with the number of accounts or customers.
- **Meters & Services:** Estimated costs associated with installation, maintenance, and repair of meters and services. These costs are assumed to vary by meter size based on the published "meter and service" ratios.
- **Base Demand:** Estimated costs associated with meeting a constant, or average, annual rate of use.
- **Peak Demand:** Estimated costs associated with meeting usage requirements in excess of average are in this category.
- **Fire Protection:** Costs related to providing fire protection requirements in keeping with State law and City ordinance are included in this category. The fire flow requirements vary for each customer class and are established by industry standards and through the City's comprehensive planning process.

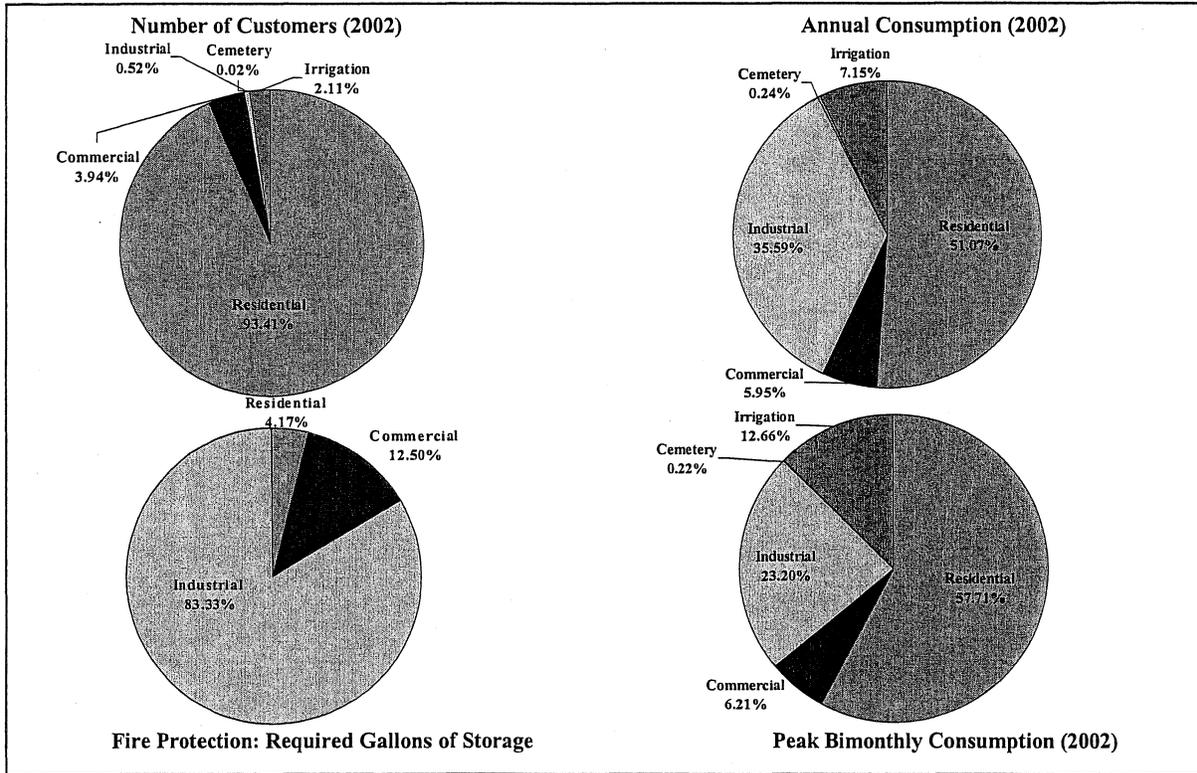
Results of the functional allocation are summarized in Exhibit 12.

Exhibit 12: Water Utility 2002 Projected Functional Cost Allocation



These functional costs are then allocated to customer classes. The City provided customer-billing data including the number of customers in each class, meter sizes, and billed water usage.

Exhibit 13: Water Demand Characteristics



In allocating the costs to customer classes, several issues have been considered, including:

- Water used for irrigation is exempt from state excise tax.
- By definition, irrigation and cemetery customers do not require direct fire protection.

The table in Exhibit 14 presents the water rate revenue by customer class compared to the current revenue distribution, adjusted by the 3.42% projected revenue increase applied to rates “across-the-board.”

Exhibit 14: Shifts in Cost-of-Service by Customer Class

Customer Classes	2004 Revenue with Across-the-Board Increase	2004 Cost of Service	Indicated Increase/ (Decrease)
Residential	\$ 1,420,974	\$ 1,369,629	-3.61%
Commercial	185,700	163,968	-11.70%
Industrial	632,312	637,191	0.77%
Cemetery	2,096	4,039	92.70%
Irrigation	96,635	162,890	68.56%
TOTAL	\$ 2,337,717	\$ 2,337,717	0.00%

The shifts between customer classes can be attributed to fire protection, peaking, and meter & service allocations. In particular, recognition of the extreme peaking characteristics of irrigation and cemetery customers. Using the cost of service results as a guideline, the study then evaluated how to implement the required rate increases and move toward the cost of service results.

A series of "phasing in" scenarios were evaluated by the City Council and the chosen scenario is summarized below. It is characterized by the following major changes from the current structure:

- Increases in service charge by meter size to reflect the larger proportion of costs in the meter & service category.
- Consistent application of Residential Class designation.
- Combining the City, Commercial, and Residential/Commercial classes into a single Commercial class, recognizing the similarities in uses.
- Establishing an outside City cemetery at 1.5 times the inside City rate.
- Phasing in increases to the irrigation rates.

The new rate structure phases in the cost of service rates so that by 2008, each customer class is projected to be paying their cost of service share, with the exception of cemeteries, which Council directed to remain at the 2003 volume rate. Exhibit 15 presents the new rate schedule, a five-year phase-in to cost of service rates, holding the cemetery volume rate constant and not increasing the irrigation rate until 2005.

Exhibit 15: Water Rates

MONTHLY SERVICE CHARGE							
	Meter Size	Year					
		2003	2004	2005	2006	2007	2008
INSIDE CITY	5/8"	\$ 4.01	\$ 5.70	\$ 5.70	\$ 6.07	\$ 6.43	\$ 6.43
	3/4"	4.02	6.18	6.18	6.58	6.97	6.97
	1.0"	4.04	7.62	7.62	8.12	8.60	8.60
	1.25"	4.08	8.58	8.58	9.15	9.68	9.68
	1.5"	4.10	9.54	9.54	10.17	10.77	10.77
	2.0"	4.16	14.83	14.83	15.80	16.73	16.73
	3.0"	4.32	53.77	53.77	57.29	60.65	60.65
	4.0"	4.53	68.19	68.19	72.65	76.92	76.92
	6.0"	5.08	101.84	101.84	108.50	114.88	114.88
	8.0"	5.74	140.29	140.29	149.48	158.26	158.26
10.0"	6.50	183.55	183.55	195.57	207.06	207.06	
OUTSIDE CITY	5/8"	\$ 6.03	\$ 8.55	\$ 8.55	\$ 9.11	\$ 9.64	\$ 9.64
	3/4"	6.05	9.27	9.27	9.88	10.46	10.46
	1.0"	6.08	11.43	11.43	12.18	12.90	12.90
	1.25"	6.12	12.87	12.87	13.72	14.52	14.52
	1.5"	6.15	14.32	14.32	15.25	16.15	16.15
	2.0"	6.25	22.25	22.25	23.70	25.10	25.10
	3.0"	6.48	80.65	80.65	85.93	90.98	90.98
	4.0"	6.81	102.28	102.28	108.98	115.38	115.38
	6.0"	7.63	152.75	152.75	162.76	172.32	172.32
	8.0"	8.61	210.44	210.44	224.22	237.38	237.38
10.0"	9.76	275.33	275.33	293.36	310.59	310.59	

Exhibit 15: Water Rates (continued)

		VOLUME CHARGE (\$/ccf)					
		Year					
	Customer Class	2003	2004	2005	2006	2007	2008
INSIDE CITY	Residential	\$ 1.26	\$ 1.16	\$ 1.20	\$ 1.22	\$ 1.24	\$ 1.24
	Commercial	1.68	1.35	1.40	1.45	1.50	1.50
	Industrial	1.08	1.12	1.16	1.20	1.25	1.25
	Cemetery	0.56	0.56	0.56	0.56	0.56	0.56
	Irrigation	0.76	0.76	0.95	1.10	1.25	1.40
OUTSIDE CITY	Residential	\$ 1.88	\$ 1.74	\$ 1.80	\$ 1.83	\$ 1.86	\$ 1.86
	Commercial	2.51	2.03	2.10	2.18	2.25	2.25
	Industrial	1.63	1.68	1.74	1.80	1.88	1.88
	Cemetery	n/a	0.84	0.84	0.84	0.84	0.84
	Irrigation	1.14	1.14	1.43	1.65	1.88	2.10

The phased-in rate increases are expected to produce the revenue increases presented in Exhibit 16. Note that the phased in increases are projected to generate slightly higher revenue over the 5-year period than the revenue requirements analysis indicated. However, this additional revenue provides a conservative estimate and may not be realized due to potential water conservation that may occur.

Exhibit 16: Expected Revenue Increases

Revenue Requirement Increases		2004	2005	2006	2007	2008
Calculated	Annual	3.42%	0.00%	6.55%	5.87%	0.00%
	Cumulative	3.42%	3.42%	10.19%	16.66%	16.66%
Phase-In Cost of Service	Annual	3.75%	3.58%	3.89%	3.91%	0.68%
	Cumulative	3.75%	7.47%	11.65%	16.02%	16.81%

Exhibit 17 on the following page is presented to provide context in evaluating the changes in rate structure on selected sample water bills.

The detailed spreadsheets supporting the water revenue requirements and rate calculations are contained in Technical Appendix B of the separate Technical Appendix document.

Exhibit 17: Water Sample Monthly Bills

INSIDE CITY					
	Meter Size	Consumption	Current Rates (2003)	Proposed Phased-In 2004 Rates	Difference
Residential	5/8"	0	\$ 4.01	\$ 5.70	\$ 1.69
		5	10.31	11.30	0.99
		11.74	18.80	18.85	0.05
		15	22.91	22.50	(0.41)
Commercial	5/8"	0	\$ 4.01	\$ 5.70	\$ 1.69
		15	29.21	25.95	(3.26)
		30.90	55.92	47.41	(8.51)
		45	79.61	66.45	(13.16)
Industrial	2.0"	0	\$ 4.16	\$ 14.83	\$ 10.67
		1,000	1,084.16	1,134.83	50.67
		1,464.70	1,586.04	1,655.30	69.26
		2,000	2,164.16	2,254.83	90.67
Cemetery	4.0"	0	\$ 4.53	\$ 68.19	\$ 63.66
		200	116.53	230.19	113.66
		293.50	168.89	305.92	137.03
		400	228.53	392.19	163.66
Irrigation	5/8"	0	\$ 4.01	\$ 5.70	\$ 1.69
		50	42.01	61.20	19.19
		75.24	61.19	89.22	28.02
		100	80.01	116.70	36.69

C. Sewer Utility

1. Revenue Requirements

a. *Assumptions*

Based on the methodology described in the previous chapter, FCS Group projected Camas's sewer revenue requirements for the years 2003 through 2008, under the following general assumptions:

- Expenditures are based on 2003 estimates, adjusted for known changes and escalated for future years; salaries and benefits are based on annualized actuals through June and insurance reflects the actual for the year.
- Expenditures for 2004-2009 reflect adjustments to recognize known changes and 2004 budgeted interfund service charges.
- Assumed addition of a treatment plant operator in 2004, whose salary and benefits total \$75,000.
- Projected cost of Caustic Soda will increase substantially in 2004; Wafertech will continue to reimburse the City for incurred Caustic Soda expenses at 45% of the total cost.
- Most expenditures have been escalated by general cost inflation (assumed at 3% annually), with Office & Operating Supplies, Fuel costs, and Public Utility costs escalated by general cost inflation plus growth.
- Assumes implementation of 2004 rate increase adopted prior to start of study, which results in projected use of cash balances in 2004.
- Sewer growth rates are based on water growth rates, excluding the Wafertech increase described for water.
- Combined cash balances have been split evenly between the water and sewer utilities. A transfer of \$800,000 from the operating fund to the capital fund was assumed for modeling purposes. After the transfer, the operating fund beginning balance was assumed at \$0.55 million; the capital fund beginning balance was \$1.38 million.
- Capital projects are based on the Capital Facilities Plan, with minor adjustments to smooth impacts. Debt is used to fund capital projects based on need.
- Existing debt service has been allocated between water and sewer utilities based on the percentages provided by the City.
- To be conservative, projected SDC revenues are based on the current SDC multiplied by additional connections to the system, calculated by customer class. Any additional revenues can be used to reduce projected borrowing.

b. *Capital Funding*

The City has projected approximately \$7.83 million (current dollars) in sewer capital projects in the next five year period (2004-2008). These capital projects will be primarily financed with existing reserves, system development charges, and revenue bond proceeds. Given the level of planned capital projects and available sources, it is anticipated that the Utility will debt finance to generate proceeds estimated at \$3.99 million through 2008:

- \$1,040,000 in 2007
- \$2,950,000 in 2008

Exhibit 18 summarizes the projected capital sources and uses for the projection period.

Exhibit 18: Summary of Capital Funding

SEWER UTILITY Summary of Capital Funding	2003	2004	2005	2006	2007	2008
PROJECT COSTS						
Improvement Upgrades	\$ 204,500	\$ 193,180	\$ -	\$ 432,645	\$ 1,054,043	\$ 1,703,314
Expansions	434,333	232,180	-	1,185,449	1,054,043	1,703,314
Repairs & Replacements	-	615,160	-	-	87,739	91,249
TOTAL PROJECT COSTS	\$ 638,833	\$ 1,040,520	\$ -	\$ 1,618,094	\$ 2,195,825	\$ 3,497,877
SOURCES OF FUNDING						
Developer Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grants	36,017	-	-	-	-	-
System Development Charges	589,106	612,600	589,106	589,106	589,106	589,106
Interfund Loan Proceeds	101,908	101,508	101,108	100,708	77,308	-
Cash Balances	-	326,412	-	928,281	489,411	-
New Debt Proceeds	-	-	-	-	1,040,000	2,950,000
TOTAL SOURCES OF FUNDING	\$ 727,030	\$ 1,040,520	\$ 690,214	\$ 1,618,094	\$ 2,195,825	\$ 3,539,106
<i>Total New Debt Issued</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ 1,164,854</i>	<i>\$ 3,304,154</i>

c. *Results*

In 1999, Ordinance 2282 adopted a series of annual rate increases for 2000-2004 based on the projected requirements for the sewer utility at that time. FCS Group's analysis accounted for the previously adopted 2004 rate while projecting the revenues in 2004-2008. Projected revenues, expenses, and required level of rate revenue, as well as required percentage increases in the rates, are presented in Exhibit 19.

Exhibit 19: Sewer Utility Revenue Requirements, 2003-2008

Summary of Revenue Requirements	2003	2004	2005	2006	2007	2008
SOURCES						
Rate Revenues Before Increase	\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 2,965,358	\$ 3,075,458	\$ 3,185,557
Industrial Contract Sales	42,750	101,250	104,288	107,416	110,639	113,958
Interest Earnings	15,911	12,437	19,901	21,652	22,089	26,604
Other Revenues	68,950	69,639	70,301	70,964	71,626	72,288
TOTAL SOURCES	\$ 2,631,205	\$ 2,928,486	\$ 3,049,749	\$ 3,165,390	\$ 3,279,812	\$ 3,398,407
USES						
Taxes	\$ 94,177	\$ 99,875	\$ 103,185	\$ 106,827	\$ 110,448	\$ 114,046
Collection	73,734	76,226	78,789	81,438	84,174	87,001
Pressure Collection	138,915	155,019	151,286	157,797	164,560	171,584
Pumping	246,582	257,647	268,763	280,309	292,302	304,759
Treatment	541,419	747,488	774,370	802,187	830,971	860,755
Services	500	515	530	546	563	580
Administration/Interfund/Customer Service	362,420	376,219	390,096	404,463	419,339	434,740
Total Functional Uses	\$ 1,457,748	\$ 1,712,989	\$ 1,767,020	\$ 1,833,567	\$ 1,902,357	\$ 1,973,466
Debt Service						
Existing	\$ 1,347,154	\$ 1,339,825	\$ 1,338,432	\$ 1,334,235	\$ 1,337,698	\$ 1,338,093
New	-	-	-	-	101,557	389,629
Total Debt Service	\$ 1,347,154	\$ 1,339,825	\$ 1,338,432	\$ 1,334,235	\$ 1,439,255	\$ 1,727,722
Additions to Reserve	\$ -	\$ -	\$ 43,762	\$ 10,939	\$ 11,308	\$ 11,689
TOTAL USES	\$ 2,804,902	\$ 3,052,814	\$ 3,149,213	\$ 3,178,742	\$ 3,352,920	\$ 3,712,876
INCREASE CALCULATION						
Rate Revenue Including Previous Increases	\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 3,072,794	\$ 3,186,882	\$ 3,300,971
Total Annual Revenue Deficiency*	180,652	129,307	103,447	-	-	211,647
RATE REVENUE AFTER INCREASES	\$ 2,684,246	\$ 2,874,467	\$ 2,958,706	\$ 3,072,794	\$ 3,186,882	\$ 3,512,618
<i>Annual Rate Increase</i>	<i>0.00%</i>	<i>0.00%</i>	<i>3.62%</i>	<i>0.00%</i>	<i>0.00%</i>	<i>6.41%</i>
<i>Cumulative Rate Increase</i>	<i>0.00%</i>	<i>0.00%</i>	<i>3.62%</i>	<i>3.62%</i>	<i>3.62%</i>	<i>10.27%</i>
<i>*After Excise Tax adjustment</i>						

The projected rate increase in 2005 reflects full recognition of the increased costs described earlier. The increase in 2008 is primarily driven by new debt service for major capital projects planned for 2007-2008.

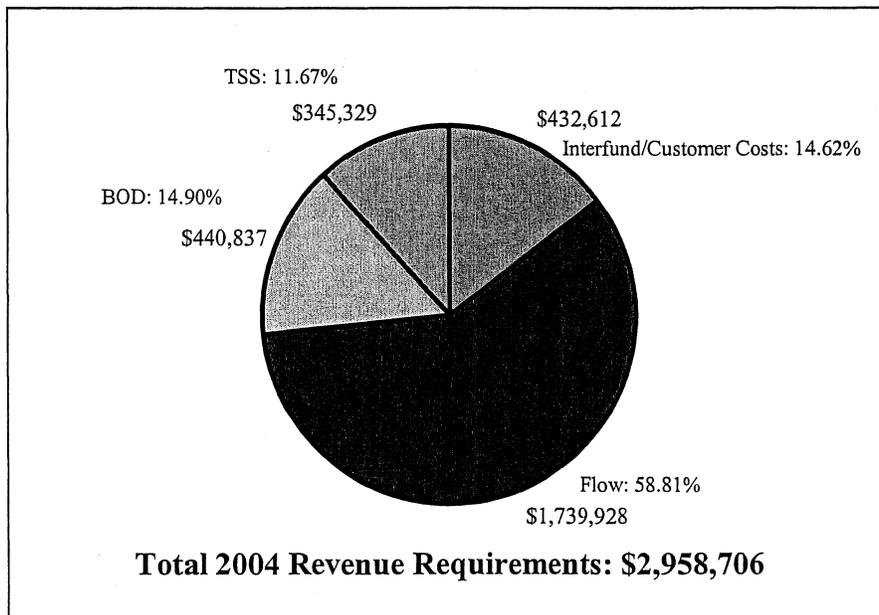
2. Cost of Service and Rate Design

FCS Group analyzed the cost of service using the general methodology explained in Chapter II. As a first step, sewer utility plant and annual expenses were allocated to the following functional cost categories:

- Customer: Estimated costs associated with serving customers regardless of the level of water they use, such as billing and office support, are included in this category. These costs are typically associated with the number of accounts or customers.
- Flow: Estimated costs that are assumed to vary with the volume of sewage processed as measured by water use.
- Strength: Estimated costs that are assumed to vary with the organic strength of sewage (the level of pollutants to be removed).

Allocation of the rate revenue requirement among these functional categories is presented in Exhibit 20.

Exhibit 20: Allocation of Rate Revenue Requirement to Functional Categories



At the second stage, these functional costs are distributed to customer classes based on customer class demand and capacity characteristics. The table in Exhibit 21 presents the sewer rate revenue by customer class compared to the current revenue distribution at the adopted 2004 rate

plus the projected 2005 increase of 3.82% applied to all rate components “across the board”. While there is a minor shift away from the residential class, the current rate structure generates revenue similar to the cost of service.

Exhibit 21: Shifts in Cost-of-Service by Customer Class

Customer Classes	2005 Revenue with Across-the-Board Increase	2005 Cost of Service	Indicated Increase/(Decrease)
Residential	\$ 1,779,103	\$ 1,745,416	-1.89%
Commercial & Industrial	1,179,603	1,213,290	2.86%
TOTAL	\$ 2,958,706	\$ 2,958,706	0.00%

In evaluating the rates, the Single-family and Multifamily customer classes were combined into a Residential class, reflecting how rates were actually applied, and the City, Commercial, and Residential/Commercial classes were combined into the Commercial class. Residential customers are billed a fixed monthly amount, based on average demand placed on the system by the class. Commercial customers are billed a fixed monthly amount, plus a volume charge based on contributed flow to the system. The 2004 rates were left in place as previously adopted and the cost of service rates are phased in through 2008, resulting in the recommended rates presented in Exhibit 22.

Exhibit 22: Sewer Rates

Residential							
	Customer Class	Year					
		2003	2004*	2005	2006	2007	2008
INSIDE CITY	Monthly Service Charge	\$ 20.75	\$ 22.25	\$ 22.60	\$ 23.05	\$ 23.55	\$ 24.05
OUTSIDE CITY	Monthly Service Charge	\$ 31.13	\$ 33.38	\$ 33.90	\$ 34.58	\$ 35.33	\$ 36.08

Commercial & Industrial							
	Customer Class	Year					
		2003	2004*	2005	2006	2007	2008
INSIDE CITY	Monthly Service Charge	\$ 4.65	\$ 4.65	\$ 5.00	\$ 5.25	\$ 5.50	\$ 5.75
	Volume Charge (\$/ccf)	2.10	2.15	2.25	2.30	2.35	2.45
OUTSIDE CITY	Monthly Service Charge	\$ 6.98	\$ 6.98	\$ 7.50	\$ 7.88	\$ 8.25	\$ 8.63
	Volume Charge (\$/ccf)	3.15	3.23	3.38	3.45	3.53	3.68

* Previously Adopted 2004 Rates

The phased-in rate increases are expected to produce the revenue increases presented in Exhibit 23.

Exhibit 23: Expected Revenue Increases

Revenue Requirement Increases		2004	2005	2006	2007	2008
Calculated	Annual	0.00%	3.62%	0.00%	0.00%	6.41%
	Cumulative	0.00%	3.62%	3.62%	3.62%	10.27%
Phase-In Cost of Service	Annual	0.00%	2.99%	2.08%	2.17%	2.96%
	Cumulative	0.00%	2.99%	5.14%	7.42%	10.60%

The detailed spreadsheets supporting the sewer revenue requirements and rate calculations are contained in Technical Appendix C of the separate Technical Appendix document.

C. Sanitation Utility

1. Revenue Requirements

a. Assumptions

Based on the methodology described in the previous chapter, FCS Group projected Camas's sanitation revenue requirements for the years 2003 through 2008, under the following general assumptions:

- Expenditures are based on 2003 annualized expenditures through June, with the following adjustments:
 - Recycling expenditures at \$14,100 per month,
 - New truck rental fees added to expenditures at \$55,000 per year per truck in the year after the new vehicle was purchased.
- Expenditures for 2004-2009 reflect adjustments to recognize known changes and 2004 budgeted interfund service charges.
- Most expenditures have been escalated by general cost inflation (assumed at 3% annually), with Office & Operating Supplies, Interfund Processing Services costs, Customer Billing costs, and Public Utility costs escalated by general cost inflation plus growth.
- Increases in contract recycling costs for inflation are assumed to be passed through in the recycling rate each year.
- Sanitation customer (revenue) growth is projected at 2.00% per year.
- Sanitation capital expenditures, which consist of truck purchases and replacements, are based on the Capital Facilities Plan. Sanitation capital expenditures are funded on a "pay as you go" basis, consistent with City practice. Equipment replacement funds are used for scheduled truck replacements.

b. Capital Funding

The City expects that the Sanitation Utility will incur \$310,000 (current dollars) in capital costs during the five-year period of the study (2004-2008). The Sanitation Utility plans to fund purchases of capital items exclusively through rate revenue, with replacements funded through the equipment replacement fund.

c. Results

Projected revenues, expenses, and the required level of rate revenue, as well as the percentage increase in rates, are summarized in Exhibit 24 on the following page.

Exhibit 24: Sanitation Revenue Requirements, 2003-2008

Summary of Revenue Requirements	2003	2004	2005	2006	2007	2008
SOURCES						
Rate Revenues Before Increase	\$ 1,148,020	\$ 1,170,980	\$ 1,194,399	\$ 1,218,287	\$ 1,242,653	\$ 1,267,506
Recycling Revenues	154,500	159,135	163,909	168,826	173,891	179,108
Operating Fund Interest Earnings	11,127	7,555	16,755	16,755	18,844	20,502
Other Revenues	7,400	7,548	7,699	7,853	8,010	8,170
Use of Reserves	<u>135,479</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
TOTAL SOURCES	\$ 1,456,525	\$ 1,345,217	\$ 1,382,763	\$ 1,411,722	\$ 1,443,399	\$ 1,475,286
USES						
Disposal	\$ 420,000	\$ 433,000	\$ 454,650	\$ 477,383	\$ 501,252	\$ 526,314
Recycling	208,834	215,338	222,049	228,974	236,120	243,494
Customer Accounts	95,115	31,441	32,872	34,371	35,940	37,584
Administration/General	105,717	91,224	93,444	95,722	98,060	100,461
Refuse Collection	<u>469,996</u>	<u>533,058</u>	<u>541,683</u>	<u>605,582</u>	<u>614,763</u>	<u>624,235</u>
Total Functional Uses	\$ 1,299,662	\$ 1,304,060	\$ 1,344,698	\$ 1,442,031	\$ 1,486,135	\$ 1,532,088
Rate-Funded Capital Improvement Program	\$ 200,000	\$ -	\$ 118,976	\$ -	\$ -	\$ -
Additions to Reserve	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
TOTAL USES	\$ 1,499,662	\$ 1,304,060	\$ 1,463,674	\$ 1,442,031	\$ 1,486,135	\$ 1,532,088
INCREASE CALCULATION						
Rate Revenue Including Previous Increases	\$ 1,148,020	\$ 1,170,980	\$ 1,194,399	\$ 1,303,899	\$ 1,329,977	\$ 1,356,576
Total Annual Revenue Deficiency*	<u>44,747</u>	<u>-</u>	<u>83,933</u>	<u>-</u>	<u>-</u>	<u>-</u>
RATE REVENUE AFTER INCREASES	\$ 1,192,767	\$ 1,170,980	\$ 1,278,332	\$ 1,303,899	\$ 1,329,977	\$ 1,356,576
<i>Annual Rate Increase</i>	<i>0.00%</i>	<i>0.00%</i>	<i>7.03%</i>	<i>0.00%</i>	<i>0.00%</i>	<i>0.00%</i>
<i>Cumulative Rate Increase</i>	<i>0.00%</i>	<i>0.00%</i>	<i>7.03%</i>	<i>7.03%</i>	<i>7.03%</i>	<i>7.03%</i>
<i>*After Excise Tax adjustment</i>						

The 2005 increase of 7.03% coincides with the planned purchase of a new Refuse Truck occurs in 2005. Increases in contract recycling costs for inflation are assumed to be passed through in the recycling rate each year automatically and are not reflected in the rate increase percentage. No debt is issued, as capital items are funded through rates or equipment replacement reserves.

2. Cost of Service and Rate Design

In conducting the cost of service analysis, FCS Group followed the general methodology described in Chapter II. As a first step, the annual sanitation expenses were allocated to the following functional cost categories:

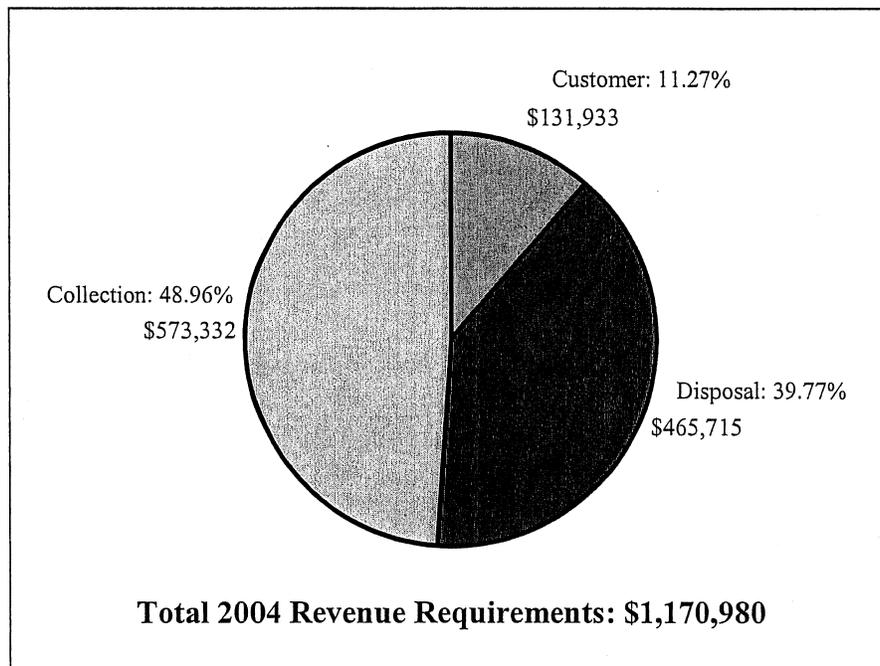
- **Customer Costs:** Costs associated with providing service to customers regardless of demand on the system (billing, office support, etc.)
- **Disposal:** Costs associated with disposing of waste. Varies based on average weight of each size of container:

35-gal: 30 lbs.	1.5 yard:	300 lbs.
65-gal: 60 lbs.	2 yard:	400 lbs.
95-gal: 90 lbs.		

- **Pickup:** Costs associated with emptying each container into the garbage truck and transporting. Amount of time varies based on size of container:
35-, 65-, and 95-gallon container set at 30 seconds/container
1.5 and 2 yard dumpsters set at 125 seconds/container

Results of the functional allocation are presented in Exhibit 25.

Exhibit 25: Allocation of Rate Revenue Requirement to Functional Categories



These functional costs are then allocated to customer classes. The City provided customer data including the number of customers in each class and number of times the can or container was picked up per week.

The cost of service results indicated shifts in costs due to different pounds per can and pickup time assumptions versus prior study (June 1992) due to the technology change the City implemented in the mid 1990's. These changes results in:

- Shrinking of the differentials based on can size, and
- Shifts between 1.5 and 2 yd services.

The cost-of-service shifts are phased in by holding decreasing elements constant and raising the increasing elements in 2004. In addition, the 20% surcharge on carry-out containers is eliminated from the rate schedule since it has not been applied in practice.

Exhibit 26 presents the new sanitation rate structure. Note that the Dumpster rate table in the ordinance reflects the figures below minus the rental charges, which are shown separately in the rate ordinance.¹

Exhibit 26: Sanitation Rates

Regular Dumpsters

	# of Empties/ Week	Current Rates (2003)	Proposed Rates (2004)		Current vs. COS	
			Across the Board	Cost of Service	Difference (\$)	Difference (%)
1.5 Yard Dumpster	1	\$ 78.70	\$ 78.70	\$ 78.70	\$ -	0.00%
	2	143.05	143.05	149.66	6.61	4.62%
	3	207.40	207.40	223.45	16.05	7.74%
	4	271.75	271.75	297.24	25.49	9.38%
	5	336.10	336.10	371.02	34.92	10.39%
2 Yard Dumpster	1	\$ 105.47	\$ 105.47	\$ 105.47	\$ -	0.00%
	2	194.74	194.74	194.74	-	0.00%
	3	284.01	284.01	284.01	-	0.00%
	4	373.28	373.28	373.28	-	0.00%
	5	462.55	462.55	462.55	-	0.00%

Compacted Dumpsters

	# of Empties/ Week	Current Rates (2003)	Proposed Rates (2004)		Current vs. COS	
			Across the Board	Cost of Service	Difference (\$)	Difference (%)
1.5 Yard Dumpster	1	\$ 143.05	\$ 143.05	\$ 149.66	\$ 6.61	4.62%
	2	271.75	271.75	297.24	25.49	9.38%
	3	400.45	400.45	444.81	44.36	11.08%
	4	529.15	529.15	592.39	63.24	11.95%
	5	657.85	657.85	739.97	82.12	12.48%
2 Yard Dumpster	1	\$ 194.74	\$ 194.74	\$ 194.74	\$ -	0.00%
	2	373.28	373.28	373.28	-	0.00%
	3	551.82	551.82	551.82	-	0.00%
	4	730.36	730.36	730.36	-	0.00%
	5	908.90	908.90	908.90	-	0.00%

Regular Monthly Service

Customer Class	Current Rates (2003)	Proposed Rates (2004)		Current vs. COS	
		Across the Board	Cost of Service	Difference (\$)	Difference (%)
Minican (35 gal EOW)	\$ 9.25	\$ 9.25	\$ 9.25	\$ -	0.00%
1-35 gal Can	12.20	12.20	14.12	1.92	15.76%
1-65 gal Can	18.95	18.95	18.95	-	0.00%
1-95 gal Can	25.70	25.70	25.70	-	0.00%

The phased-in rate increases are expected to produce the revenue increases presented in Exhibit 27.

Exhibit 27: Expected Revenue Increases

Revenue Requirement Increases		2004	2005	2006	2007	2008
Calculated	Annual	0.00%	7.03%	0.00%	0.00%	0.00%
	Cumulative	0.00%	7.03%	7.03%	7.03%	7.03%
Phase-In Cost of Service	Annual	7.00%	0.00%	0.00%	0.00%	0.00%
	Cumulative	7.00%	7.00%	7.00%	7.00%	7.00%

The detailed spreadsheets supporting the sanitation revenue requirements and rate calculations are contained in Technical Appendix D of the separate Technical Appendix document.

¹ Early in the study process, the assumption was made that the rental charges would be eliminated and, as a result, the underlying analysis excluded dumpster rental revenues. The subsequent decision to leave the rental charges in place resulted in the adjustment of the rate tables in the ordinance to deduct the rental charges, which the ordinance shows as a separate item. This adjustment correctly reflects that the revenues generated from rental charges will continue.

Appendix A
Stormwater Issue Papers

ISSUE PAPER #1

Stormwater Rates: Is It Time in Camas?

Issue

Is it time to begin to recover all or a portion of ongoing stormwater operating and perhaps capital costs in a monthly rate?

Analysis

A stormwater system, through the use of ditches, pipes, streams, ponds, and other man-made facilities and natural features, essentially collects and / or directs stormwater runoff in order to minimize its negative impacts. Uncontrolled stormwater runoff causes “increased flooding, stream channel degradation, habitat loss, changes in water temperature, contamination of water resources, and increased erosion and sedimentation.”¹

In 1989, after completion of the Fisher Drainage Basin Financing Plan, the City of Camas adopted a Stormwater Drainage Utility (Camas Municipal Code, Chapter 13.88). At the time, the City funded ongoing stormwater operations and maintenance (O & M) activities with general tax revenue. It was a recommendation of the Financing Plan that the City continue to utilize general tax revenues for funding operations in the near-term. However, it is also clear that the utility was established in order to allow for a transition to monthly rates as the primary source of such funding.

The only funding mechanism adopted as part of the utility formation was the City’s Drainage Capital Development Fee. The City still imposes these fees, one-time charges assessed at the time of development, on new development as it occurs within the Fisher Drainage Basin. These charges were initially calculated based on the projected cost of capital construction needed in the basin. They are intended, and perhaps legally required, to be spent only on capital projects.

Most existing stormwater utilities in the Northwest recover ongoing O & M costs, as well as some capital costs, in monthly (or other applicable periodic) rates. The primary reasons that they do are summarized below, with particular attention paid to the City of Camas’ situation.

- **Dedicated and reliable funding for stormwater.** Ongoing stormwater rates provide a reliable and predictable stream of revenue that is dedicated to the stormwater management function. In contrast, general tax revenues are subject to re-prioritization on an annual basis. While this has at times been considered desirable as a way of constraining local government spending, in an era of increasing mandatory regulatory requirements [e.g., National Pollutant

¹ *Stormwater Strategies: Community Response to Runoff Pollution, Natural Resources Defense Council, May 1999, pages xi-xii.*

Discharge Elimination System (NPDES) permitting requirements] which necessitate a stable funding source, such an approach may no longer be realistic or practical.

- **Equitable cost recovery.** The “general tax revenues” that fund the existing program are, it is likely, primarily property tax receipts. Property taxes are based on each property’s assessed valuation, a measure that has little if anything to do with the amount of service received by an individual parcel. Stormwater monthly rates are typically based on each customer’s relative contribution of runoff – an accepted and valid measure of service received by the stormwater program. So, the recovery of stormwater operating costs through ongoing rates can be structured so that those who cause the problem, and consequently receive the service, generally pay proportionately for their impacts.

There are existing utilities that, like Camas, have funded operations out of general tax revenues. For example, up until a couple of years ago, the City of Burlington, Washington funded capital out of rates and capital development fees, and operations out of the general fund. There are a number of reasons communities have chosen to pursue such a path.

- **Perception of a windfall.** The Council was concerned at the time that taking costs out of the general fund, recovering them with user fees, and not reducing taxes commensurately, would be looked upon as disingenuous. Further, they wanted the ability to re-prioritize their stormwater program spending.
- **New bureaucracy.** Often, the perception is that a city is creating a new bureaucracy when it establishes a utility or in this case, a utility rate. In fact, creation of a funding source does not require addition staffing – only an increase in the level of service provided may require additional full-time equivalents.
- **Affordability.** The affordability issue varies from community to community. Typical single family rates range from \$3 per month up to over \$12 per month. Commercial and other larger developed properties can incur much higher charges. A \$5 monthly per equivalent residential unit (ERU) rate for an acre of developed, impervious, commercial property (assuming one ERU = 2,500 square feet of impervious surface area) would result in a charge of \$87 per month.

The table on the following page summarizes a sampling of stormwater monthly rates (per ERU).

<u>Jurisdiction</u>	<u>Monthly Rate/ERU</u>
Clark County	\$2.75
Vancouver	\$3.00
Battle Ground	\$3.23
Gresham, OR	\$6.50
Average for 10 Puget Sound Agencies (ranging from \$6.50-\$13.65)	\$9.50

Communities that have implemented stormwater utility rates have often pursued paths that others have learned from, including this final cautionary note:

- **The trap of under-funding.** The temptation is great to start small and implement a low rate to get things started. The problem is, however, that often the expectations of service delivery remain high, even after negotiations have resulted in a “watered down” rate. This disconnect between high expectations and lack of sufficient funding can create negative public opinion – making it more difficult to raise rates in the future and meet those expectations.

Recommendation

To be determined.

ISSUE PAPER #2

Implementation of Stormwater Rates

Issue

The City of Camas may consider adopting an ongoing stormwater utility rate to fund elements of its stormwater management program. What steps are required to do so, and what policy issues must be resolved as prerequisites to implementation?

Analysis

There are generally three major steps in the transition to a stormwater rate for funding all or a portion of the stormwater program: first, development of a policy framework; second, calculation of a supporting rate; and three, implementation and billing.

In order to develop a policy framework for the rate, the following key policy issues (at least) must be resolved.

- **Cost basis.** Rates are usually only part of a broader funding strategy that could include sources such as the capital development fees already in place, special fees for the recovery of specific costs like inspection, etc. Rates are most often set to recover those operating and capital costs not met by these other sources. Often, these costs include system maintenance, planning and engineering, public education, water quality, and in some cases, small works capital and debt service. The City could choose to continue to supplement the utility with general tax or other revenues in order to minimize or continue to forego a rate-based funding approach.
- **Rate basis.** What is an appropriate and equitable basis for setting stormwater utility rates? Impervious surface area is the most common approach. Impervious surface is “surface that cannot be penetrated by water such as pavement, rock, or a rooftop and thereby prevents infiltration and generates runoff.”¹ There is a strong and scientifically supportable linkage between increased imperviousness in a watershed and problems such a localized flooding, water quality degradation, and loss of fish habitat. Other potential bases include development density, gross parcel area, and vehicle trip generation (water quality only). The choice of a rate basis must be balanced against practical constraints such as data availability.
- **Area-specific vs. Citywide rates.** Depending on the development patterns and physical characteristics of the City, it may cost

¹ *Stormwater Strategies: Community Response to Runoff Pollution, Natural Resources Defense Council, May 1999, page 262.*

considerably more to serve one area of the City than another. Some communities (a small minority) have chosen to acknowledge these differences by charging rates that vary by basin or other geographical lines of demarcation. The perceived equity of such an approach must be balanced against the philosophical goal of promoting a single community, as well as the additional complexity of the approach.

- **Credits.** The City's current approach to funding stormwater operations with general tax revenues effectively precludes tax-exempt property from paying its fair share for stormwater services. A user fee requires that those served pay proportionately for that service, without regard to tax-exempt status or other factors that do not affect the cost to serve that property. However, some communities choose to offer senior, low-income, or other credits that are not cost-based.

Utility customers that provide on-site mitigation may be candidates for a rate credit in some form, although there is no legal requirement to offer one. Such on-site activities may actually reduce costs to the utility. The question for most communities is whether to offer a rate credit for those customers who meet City development requirements or only to those customers who exceed standards – essentially providing facilities that are of more general service to the utility.

- **Maintenance of private facilities.** The existence of stormwater facilities on private property can create an issue for cities. Private facilities must be maintained to be effective. So, if the property owner retains responsibility for maintenance, then the City must inspect / enforce its standards. Conversely, if the City is allowed to provide maintenance of private facilities, access to the facilities, often through easements, must be obtained. The City's rate policy with regard to such private facilities will depend on the City's objective. If the City wishes to assume responsibility for maintenance of private facilities, then it would be advisable to charge the full rate to customers who maintain their own facilities as an incentive to allow the City to do it. If the City wishes to encourage or allow private maintenance of private facilities, then it might be advisable to devise a partial rate credit in recognition of those efforts.
- **Streets.** The City street system makes up a substantial amount of impervious surface area, generating runoff that requires management. The street system also provides stormwater conveyance and, as such, can be thought of as part of the stormwater system itself. Cities weigh these issues in their decisions whether or not to charge the street fund for the impervious surface area of the streets. This policy choice may also be influenced by the fact that charging its own streets may allow a city to charge county and state roads in its boundaries.

Once the City determines its direction on these policy issues, and perhaps others, it is necessary to gather needed cost and customer base

**City of Camas, WA
Utility Rate Study**

Technical Appendices

December 22, 2003



FINANCIAL CONSULTING SOLUTIONS GROUP, INC.

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City of Camas Utility Rate Study

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Technical Appendix A
SDC Spreadsheets



City of Camas Water Utility System Development Charges

File: F:\Camas\Water 10-28 II - no irr incr.xls]SDC-WA
Date: 12/12/2003

EXISTING COST BASIS		2002
<u>Utility Plant-in-Service</u>		
Source of Supply	\$	1,832,492
Treatment		1,001,238
Transmission & Distribution		11,043,761
Storage		3,018,573
Pumping		2,906,640
Hydrants		692,265
Meters		191,381
Services		4,066,497
General Plant		1,216,919
Construction Work in Progress (CWIP)		-
<i>Total Plant-in-Service</i>	\$	<u>25,969,766</u>
LESS:		
<u>Contributed Capital</u>		
Treatment	\$	-
Transmission & Distribution		6,292,968
Storage		-
Pumping		-
Hydrants		642,159
Meters		-
Services		3,352,008
General Plant		-
<i>Less Total Capital Contributions</i>	\$	<u>10,287,135</u>
Net Plant Allocable	\$	<u>15,682,631</u>
PLUS:		
<u>Interest on Plant-in-Service (Max. 10 Years)</u>		
Source of Supply	\$	762,346
Treatment		474,448
Transmission & Distribution		2,362,233
Storage		1,033,792
Pumping		926,295
Hydrants		35,251
Meters		121,692
Services		605,670
General Plant		238,844
<i>Total Interest on Utility-Built Assets</i>	\$	<u>6,560,571</u>
Allocable Cost	\$	<u>22,243,202</u>



City of Camas Water Utility System Development Charges

File: F:\Camas\Water 10-28 II - no irr incr.xls]SDC-WA

Date: 12/12/2003

FUTURE COST BASIS

New Projects (a)	Allocation of CIP Cost to Customers		
	Total Expansions/ Upgrades	Developer Donations	Net
Source of Supply	\$ 6,447,000	\$ -	\$ 6,447,000
Treatment	100,000	-	100,000
Transmission & Distrib	4,304,300	1,923,500	2,380,800
Storage	2,833,000	-	2,833,000
Pumping	1,788,800	700,000	1,088,800
Hydrants	5,000	-	5,000
Meters	10,009	-	10,009
Services	-	-	-
General Plant	353,000	-	353,000
Total:	\$ 15,841,109	\$ 2,623,500	\$ 13,217,609

(a) CIP 2003-2016



City of Camas Water Utility System Development Charges

File: F:\Camas\Water 10-28 II - no irr incr.xls]SDC-WA
Date: 12/12/2003

COST ALLOCATION

Existing Plant-in-Service	CUSTOMER BILLS	METERS & SERVICES	BASE	PEAK	FIRE PROTECTION	TOTAL	Notes
Source of Supply	\$ -	\$ -	\$ 1,365,704	\$ 1,229,134	\$ -	\$ 2,594,838	As supply plant.
Treatment	-	-	776,677	699,009	-	1,475,686	As treatment plant.
Transmission & Distribution	-	-	3,369,328	3,032,395	711,303	7,113,026	As transmission & distribution.
Storage	-	-	1,662,845	1,049,122	1,340,398	4,052,365	As storage.
Pumping	-	-	1,815,601	1,634,041	383,294	3,832,935	As pumping.
Hydrants	-	-	-	-	85,357	85,357	As hydrants.
Meters	-	313,073	-	-	-	313,073	As meters.
Services	-	1,320,159	-	-	-	1,320,159	As services.
General Plant	-	250,414	549,195	474,674	181,479	1,455,762	As total existing plant.
Total Existing Facility Cost	\$ -	\$ 3,826,180	\$ 8,391,383	\$ 7,252,743	\$ 2,772,897	\$ 22,243,202	
Existing Plant Functional Allocation	0.00%	17.20%	37.73%	32.61%	12.47%	100.00%	

Future Plant-in-Service	CUSTOMER BILLS	METERS & SERVICES	BASE	PEAK	FIRE PROTECTION	TOTAL	Notes
Source of Supply	\$ -	\$ -	\$ 3,393,158	\$ 3,053,842	\$ -	\$ 6,447,000	As supply plant.
Treatment	-	-	52,632	47,368	-	100,000	As treatment plant.
Transmission & Distribution	-	-	1,127,747	1,014,973	238,080	2,380,800	As transmission & distribution.
Storage	-	-	1,162,492	733,439	937,069	2,833,000	As storage.
Pumping	-	-	515,747	464,173	108,880	1,088,800	As pumping.
Hydrants	-	-	-	-	5,000	5,000	As hydrants.
Meters	-	10,009	-	-	-	10,009	As meters.
Services	-	-	-	-	-	-	As services.
General Plant	-	60,722	133,171	115,101	44,006	353,000	As total existing plant.
Net Future Facility Cost	\$ -	\$ 70,731	\$ 6,384,947	\$ 5,428,896	\$ 1,333,035	\$ 13,217,609	
Future Plant Functional Allocation	0.00%	0.54%	48.31%	41.07%	10.09%	100.00%	



City of Camas Water Utility System Development Charges

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CUSTOMER STATISTICS SUMMARY

Customer Class	2002 Existing Meters	Future Meters (2003-2023)	Total Meters	2002 MSEs	Future MSEs (2003-2016)	Total MSEs	2002 MCEs	Future MCEs (2003-2016)	Total MCEs
Residential	5,257	7,379	12,636	5,384	7,557	12,941	5,745	8,064	13,809
Commercial	222	312	534	436	612	1,048	758	1,064	1,823
Industrial	29	19	48	180	121	300	356	239	594
Cemetery	1	-	1	14	-	14	25	-	25
Irrigation	119	167	286	266	374	640	469	658	1,127
Total:	5,628	7,877	13,505	6,280	8,663	14,942	7,353	10,025	17,378

BASE UNIT CAPITAL COST

Total Annualized Winter Consumption	1,168,026
Existing Meter Equivalents (MCE)	7,353
Total Average Volume/MCE (ccf)	13.24 <i>one month</i>

	Allocable Capital Cost	Allocable MCE	Winter Avg. Vol. / MCE (ccf)	Projected Avg. Vol.	Cost per ccf Winter Avg.
Existing Plant	\$ 8,391,383	17,378	13.24	230,048	\$ 36
Future Plant	\$ 6,384,947	17,378	13.24	230,048	\$ 28

Customer Class	Projected Winter Avg. / MCE (ccf)	Cost per Winter Average ccf		Connection Charge per MCE		
		Existing Plant	Future Plant	Existing Plant	Future Plant	TOTAL CHARGE
Residential	8.07	\$ 36	\$ 28	\$ 294	\$ 224	\$ 518
Commercial	9.65	36	28	352	268	620
Industrial	111.00	36	28	4,049	3,081	7,130
Cemetery	7.85	36	28	286	218	504
Irrigation	8.58	36	28	313	238	551
Total or Average:	13.24	\$ 36	\$ 28	\$ 483	\$ 367	\$ 850

**Industrial figure high due to Wafertech



City of Camas Water Utility System Development Charges

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PEAK CAPACITY UNIT CAPITAL COST

System Peak Bi-Monthly Volume (ccf)	384,084
Existing Meter Equivalents (MCE)	7,353
Peak Bi-Monthly Volume / MCE (ccf)	26.12 <i>one month</i>

	Allocable Capital Cost	Allocable MCE	Winter Avg. Vol. / MCE (ccf)	Peak Bi-Monthly Vol. / MCE (ccf)	Extra Capacity Use / MCE (ccf)	Projected Peak Vol.	Cost per ccf Peak
Existing Plant	\$ 7,252,743	17,378	13.24	26.12	12.88	223,835	\$ 32
Future Plant	\$ 5,428,896	17,378	13.24	26.12	12.88	223,835	\$ 24

Customer Class	Projected Volume / MCE (ccf)			Cost per Extra Capacity ccf		Connection Charge per M.E.		
	Winter Average	Peak Bi-Monthly	Extra Cap. Use	Existing Plant	Future Plant	Existing Plant	Future Plant	TOTAL CHARGE
Residential	8.07	19.29	11.22	\$ 32	\$ 24	\$ 364	\$ 272	\$ 636
Commercial	9.65	15.72	6.07	32	24	197	147	344
Industrial	111.00	125.34	14.35	32	24	465	348	813
Cemetery	7.85	16.86	9.01	32	24	292	218	510
Irrigation	8.58	51.85	43.27	32	24	1,402	1,049	2,452
Total or Average:	13.24	26.12	12.88	\$ 32	\$ 24	\$ 417	\$ 312	\$ 730

METERS & SERVICES UNIT CAPITAL COST

	Existing Plant	Future Plant	TOTAL
Total Meters & Services Costs	\$ 3,826,180	\$ 70,731	\$ 3,896,910
Total (Existing & Future) MSEs	14,942	14,942	
UNIT COST (Cost / MSEs)	\$ 256	\$ 5	\$ 261

CUSTOMER UNIT CAPITAL COST

	Existing Plant	Future Plant	TOTAL
Total Customer Costs	\$ -	\$ -	\$ -
Total (Existing & Future) Meters	13,505	13,505	
UNIT COST (Cost / Meters)	\$ -	\$ -	\$ -



City of Camas Water Utility System Development Charges

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FIRE UNIT CAPITAL COST

		Existing Plant	Future Plant	TOTAL			
Total Fire Costs		\$ 2,772,897	\$ 1,333,035	\$ 4,105,933			
Customer Class	Fire Flow Required (gpm)	Fire Flow Equiv. Factor	Adj. Existing Meters	Adj. Future Meters	Allocated Exist. Plant Cost	Allocated Future Plant Cost	UNIT COST PER METER
Residential	1,000	98.13%	5,159	7,241	\$ 2,541,782	\$ 1,238,265	\$ 299
Commercial	1,500	147.20%	327	459	161,007	78,437	449
Industrial	5,000	490.67%	142	96	70,108	16,333	1,784
Cemetery	-	0.00%	-	-	-	-	-
Irrigation	-	0.00%	-	-	-	-	-
Total or Average:	1,019		5,628	7,795	\$ 2,772,897	\$ 1,333,035	\$ 304

UNIT COST TOTALS BY CLASS

Customer Class	CUSTOMER BILLS	METERS & SERVICES	BASE	PEAK	FIRE PROTECTION	Total
Residential	\$ -	\$ 261	\$ 518	\$ 636	\$ 299	\$ 1,714
Commercial	-	261	620	344	449	1,673
Industrial	-	261	7,130	813	1,784	9,987
Cemetery	-	261	504	510	-	1,276
Irrigation	-	261	551	2,452	-	3,263
System-wide Connection Charge	\$ -	\$ 261	\$ 850	\$ 730	\$ 304	\$ 2,145



City of Camas Water Utility System Development Charges

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Date: 12/12/2003

CLASS-SPECIFIC SYSTEM DEVELOPMENT CHARGE SUMMARY

METER SIZE	FLOW FACTOR	CUSTOMER CLASS				
		Residential	Commercial	Industrial	Cemetery	Irrigation
5/8"	1.0	\$ 1,714	\$ 1,673	\$ 9,987	\$ 1,276	\$ 3,263
3/4"	1.5	2,317	2,182	13,984	1,809	4,790
1"	2.5	3,549	3,224	22,004	2,902	7,871
1.25"	3.75	5,044	4,481	31,984	4,222	11,676
1.5"	5.0	6,539	5,738	41,964	5,543	15,481
2.0"	8.0	10,288	8,917	66,078	8,874	24,775
3.0"	16.0	21,632	18,741	131,729	19,104	50,907
4.0"	25.0	32,801	28,198	203,992	29,019	78,711
6.0"	50.0	63,477	54,122	404,375	56,212	155,596
8.0"	80.0	100,184	85,127	644,731	88,740	247,754
10.0"	115.0	142,921	121,212	925,059	126,602	355,185



City of Camas Water Utility System Development Charges

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Date: 12/12/2003

CITY OF CAMAS WATER SYSTEM DEVELOPMENT CHARGES - COMPARISON TO CURRENT CHARGES

METER SIZE	EQUIVALENT METER FACTORS	RESIDENTIAL			COMMERCIAL		
		Current	Proposed	Increase (Decrease)	Current	Proposed	Increase (Decrease)
5/8"	1.0	\$ 1,010	\$ 1,714	\$ 704	\$ 1,415	\$ 1,673	\$ 258
3/4"	1.5	1,515	2,317	802	2,123	2,182	59
1"	2.5	2,525	3,549	1,024	3,538	3,224	(314)
1.5"	5.0	5,050	6,539	1,489	7,075	5,738	(1,337)
2.0"	8.0	8,080	10,288	2,208	11,320	8,917	(2,403)
3.0"	16.0	16,160	21,632	5,472	22,640	18,741	(3,899)
4.0"	25.0			n/a	35,375	28,198	(7,177)
6.0"	50.0			n/a	70,750	54,122	(16,628)
8.0"	80.0			n/a	113,200	85,127	(28,073)

METER SIZE	EQUIVALENT METER FACTORS	INDUSTRIAL			CEMETERY*	IRRIGATION*
		Current	Proposed	Increase (Decrease)	Proposed	Proposed
5/8"	1.0	\$ 7,101	\$ 9,987	\$ 2,886	\$ 1,276	\$ 3,263
3/4"	1.5	10,652	13,984	3,332	1,809	4,790
1"	2.5	17,753	22,004	4,251	2,902	7,871
1.5"	5.0	35,505	41,964	6,459	4,222	11,676
2.0"	8.0	56,808	66,078	9,270	5,543	15,481
3.0"	16.0	113,616	131,729	18,113	8,874	24,775
4.0"	25.0	177,525	203,992	26,467	19,104	50,907
6.0"	50.0	355,050	404,375	49,325	29,019	78,711
8.0"	80.0	568,080	644,731	76,651	56,212	155,596

*Irrigation & Cemetery Meters do not currently have SDC charges.



City of Camas Sewer Utility System Development Charges

File: F:\Camas\Sewer 10-28.xls]SDC
Date: 12/10/2003

EXISTING COST BASIS

2002

<u>Utility Plant-in-Service</u>	
Collection Mains	\$ 8,661,892
Force Mains	1,628,204
Pumping	1,090,605
Treatment	19,756,670
Services	1,135,694
Manholes	376,044
General Plant	343,803
Construction Work in Progress (CWIP)	-
<i>Total Plant-in-Service</i>	<u>\$ 32,992,913</u>
LESS:	
<u>Contributed Capital</u>	
Collection Mains	\$ 1,378,941
Force Mains	1,598,484
Pumping	-
Treatment	221,765
Services	709,742
Manholes	376,044
General Plant	-
<i>Less Total Capital Contributions</i>	<u>\$ 4,284,975</u>
Net Plant Allocable	\$ 28,707,937
PLUS:	
<u>Interest on Plant-in-Service (Max. 10 Years)</u>	
Collection Mains	\$ 4,901,858
Force Mains	14,741
Pumping	254,213
Treatment	3,957,730
Services	52,955
Manholes	-
General Plant	40,717
<i>Total Interest on Utility-Built Assets</i>	<u>\$ 9,222,214</u>
Allocable Cost	\$ 37,930,152

(a) Net of Cash Balances



City of Camas Sewer Utility System Development Charges

File: F:\Camas\Sewer 10-28.xls]SDC
Date: 12/10/2003

FUTURE COST BASIS

New Projects (a)	Allocation of CIP Cost to Customers		
	Total Expansions/ Upgrades	Developer Donations	Net
Collection Mains	\$ 1,745,480	\$ 85,000	\$ 1,660,480
Force Mains	2,239,000	672,000	1,567,000
Pumping	2,465,000	500,000	1,965,000
Treatment	3,784,333	-	3,784,333
Services	-	-	-
Manholes	-	-	-
General Plant	363,500	-	363,500
Total:	\$ 10,597,313	\$ 1,257,000	\$ 9,340,313

(a) CIP 2003-2016



City of Camas Sewer Utility System Development Charges

File: F:\Camas\[Sewer 10-28.xls]SDC
Date: 12/10/2003

COST ALLOCATION

Existing Plant-in-Service	CUSTOMER	FLOW	BOD	TSS	TOTAL	Notes
Total Existing Facility Cost	\$ 1,319,394	\$ 24,905,064	\$ 7,574,273	\$ 4,131,421	\$ 37,930,152	As total existing plant.
Existing Plant Functional Allocation	3.48%	65.66%	19.97%	10.89%	100.00%	

Existing Plant-in-Service	CUSTOMER	FLOW	BOD	TSS	TOTAL	Notes
Total Future Facility Cost	\$ -	\$ 6,286,672	\$ -	\$ 3,053,641	\$ 9,340,313	As total future plant.
Future Plant Functional Allocation	0.00%	67.31%	0.00%	32.69%	100.00%	

CUSTOMER STATISTICS SUMMARY

Customer Class	2002 Units	Future Units (2003-2020)	Total Units	2002 ERUs	Future ERUs (2003-2020)	Total ERUs
Residential	5,365	6,189	11,554	5,259	6,066	11,325
Commercial & Industrial	216	249	465	3,144	3,627	6,771
Wafertech Sewer	1	-	1	2,028	-	2,028
Total:	5,582	6,438	12,020	10,431	9,693	20,124



City of Camas Sewer Utility System Development Charges

File: F:\Camas\Sewer 10-28.xls]SDC
Date: 12/10/2003

UNIT COST

Per Equivalent Residential Unit		
Customer	189	gpd
Flow	189	gpd
BOD	175	mg/l
TSS	225	mg/l

Total Facilities Cost	CUSTOMER	FLOW	BOD	TSS	TOTAL
Total Existing/Future Facilities Cost	\$ 1,319,394	\$ 31,191,735	\$ 7,574,273	\$ 7,185,063	\$ 47,270,465
				Total ERUs	20,124
				Charge per ERU	\$ 2,349

Unit Cost	CUSTOMER (gpd)	FLOW (gpd)	BOD (lbs/day)	TSS (lbs/day)	TOTAL	
Percent Allocation	2.79%	65.99%	16.02%	15.20%	100.00%	Per Total Facilities Cost
\$ Allocation	\$ 66	\$ 1,550	\$ 376	\$ 357	\$ 2,349	Per Equivalent Unit
Unit of Measure	189	189	0.276	0.355		
Unit Cost - \$	\$ 0.35	\$ 8.20	\$ 1,363.76	\$ 1,006.20		



City of Camas Sewer Utility System Development Charges

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Date: 12/10/2003

CLASS-SPECIFIC SYSTEM DEVELOPMENT CHARGE SUMMARY

CUSTOMER CLASS	SDC
Residential	\$ 2,349

CUSTOMER CLASS	METER SIZE	EQUIVALENT METER FACTORS	SDC
Commercial I	5/8"	1.00	\$ 2,349
	3/4"	1.50	3,523
	1"	2.50	5,872
	1.5"	5.00	11,745
	2.0"	8.00	18,792
	3.0"	16.00	37,584
	4.0"	25.00	58,725
	6.0"	50.00	117,449
	8.0"	80.00	187,919



City of Camas Sewer Utility System Development Charges

File: F:\Camas\Sewer 10-28.xls\SDC
Date: 12/10/2003

CITY OF CAMAS SEWER SYSTEM DEVELOPMENT CHARGES - COMPARISON TO CURRENT CHARGES

Customer Class		System Development Charges		
		Current	Proposed	Increase (Decrease)
Residential		\$ 2,034	\$ 2,349	\$ 315
Commercial I				
Meter Size	5/8"		2,349	n/a
	3/4"	2,034	3,523	1,489
	1"	3,397	5,872	2,475
	1.5"	6,773	11,745	4,972
	2.0"	10,841	18,792	7,951
	3.0"	21,703	37,584	15,881
	4.0"		58,725	n/a
	6.0"		117,449	n/a
	8.0"		187,919	n/a
Commercial II				
	<i>Units</i>			
Flow	gallons	1.55	8.55	7.00
Peaking Factor	gallons	1.66	-	(1.66)
BOD	lbs/day	1,659.00	1,363.76	(295.24)
SS	lbs/day	1,014.00	1,006.20	(7.80)

Technical Appendix B
Water Utility Spreadsheets



City of Camas Water Utility Input of Data and Assumptions

Economic & Financial Factors		2002	2003	2004	2005	2006	2007	2008
1	General Cost Inflation	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%
2	Labor Cost Inflation	0.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3	Customer Growth	0.00%	5.01%	4.54%	4.35%	4.16%	4.00%	4.10%
4	Construction Cost Inflation	0.00%	0.00%	4.00%	4.00%	4.00%	4.00%	4.00%
5	State Excise Tax	5.03%	5.03%	5.03%	5.03%	5.03%	5.03%	5.03%
6	State B&O Tax	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
7	No Escalation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8	Fund Earnings	2.00%	2.00%	2.00%	4.00%	4.00%	4.00%	4.00%
9	General Inflation plus Growth	0.00%	5.01%	7.54%	7.35%	7.16%	7.00%	7.10%
	Cumulative Customer Growth	0.00%	5.01%	9.78%	14.55%	19.32%	24.09%	29.18%
Accounting Assumptions		2002	2003	2004	2005	2006	2007	2008
424 WATER FUND								
	Beginning Operating Cash Balance [a]		\$ 344,733					
	Beginning Capital Cash Balance [b]		\$ 1,582,370					
	Restricted Balance for Existing Bond Reserves [c]		\$ 250,829					
FISCAL POLICY RESTRICTIONS								
	Minimum Working Capital (days of O&M expense)	60	60	60	60	60	60	60
	Minimum Capital Fund Balance - % of plant assets	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
REPLACEMENT FUNDING								
	<input type="checkbox"/> Do Not Fund Replacement Separate from CIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RESERVE UTILIZATION								
	Use of Cash Reserves to Meet Annual Obligations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXTERNAL FUNDING								
	Annual Amount of Interfund Assistance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Annual Repayment of Interfund Loans	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

[a] 2003 Beginning balance is combined water/sewer operating balances divided by 2 from City 2002 financial statement, less \$1,000,000 moved to Capital

[b] 2003 beginning balance is half the amount shown on the City 2002 financial statement worksheet for ending balances, plus \$1,000,000 from Operating

[c] 2003 Beginning balance is half of the combined water/sewer restricted bond reserve, \$501,658, from the balance sheet as of December 31, 2002



City of Camas Water Utility Input of Data and Assumptions

Capital Financing Assumptions	2002	2003	2004	2005	2006	2007	2008
GRANTS							
Proceeds Anticipated	\$ -	\$ 19,533	\$ -	\$ -	\$ -	\$ -	\$ -
SYSTEM DEVELOPMENT REVENUES							
System Development Charges	\$ 471,194	\$ 330,350	\$ 328,575	\$ 328,575	\$ 328,575	\$ 328,575	\$ 353,440
REVENUE BONDS							
Term (years)	20	20	20	20	20	20	20
Interest Cost	5.00%	5.00%	5.00%	6.00%	6.00%	6.00%	6.00%
Issuance Cost	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
CERB LOAN							
Term (years)	20	20	20	20	20	20	20
Interest Cost	4.00%	4.00%	4.00%	5.00%	5.00%	5.00%	5.00%
Issuance Cost	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
PWTF LOANS							
Term (years)	20	20	20	20	20	20	20
Interest Cost	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Existing Debt Service - Revenue Bonds							
TOTAL REVENUE BONDS							
Annual Interest Payment	\$ 31,378	\$ 29,890	\$ 28,102	\$ 25,846	\$ 23,183	\$ 20,382	\$ 18,058
Annual Principal Payment	<u>30,654</u>	<u>39,353</u>	<u>44,931</u>	<u>64,520</u>	<u>66,770</u>	<u>70,794</u>	<u>42,218</u>
Total Annual Payment	\$ 62,032	\$ 69,243	\$ 73,033	\$ 90,366	\$ 89,953	\$ 91,176	\$ 60,276
Existing Debt Service - CERB Loan							
TOTAL CERB LOAN							
Annual Interest Payment	\$ 33,716	\$ 32,251	\$ 30,700	\$ 29,058	\$ 27,321	\$ 25,481	\$ 23,534
Annual Principal Payment	<u>25,045</u>	<u>26,511</u>	<u>28,061</u>	<u>29,703</u>	<u>31,441</u>	<u>33,280</u>	<u>35,227</u>
Total Annual Payment	\$ 58,761	\$ 58,762	\$ 58,761	\$ 58,761	\$ 58,762	\$ 58,761	\$ 58,761
Existing Debt Service - Other Loans							
TOTAL OTHER LOANS							
Annual Interest Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Principal Payment	<u>-</u>						
Total Annual Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



City of Camas Water Utility Input of Data and Assumptions

424 Budget - Revenue		2002	2003	2004	2005	2006	2007	2008
REVENUES		<i>Actual</i>	<i>Budget</i>					
Water Sales	\$	2,059,090						
Fire Protection (Public & Private)		27,493	28,300					
Hookup Fees (other than SDCs)		51,100	40,000					
Miscellaneous Revenues		58,156	52,950					
Interfund Loan Revenue (50% Total; Bal. To Sewer)		103,009	101,908	101,508	101,108	100,708	77,308	-
TOTAL REVENUES	\$	2,298,848	\$ 223,158	\$ 101,508	\$ 101,108	\$ 100,708	\$ 77,308	\$ -
424 Budget - Expense		2002	2003	2004	2005	2006	2007	2008
WATER FUND		<i>Actual</i>	<i>Budget</i>					
100 TAXES								
53 External Taxes & Operational Assessments	\$	121,333	\$ 100,000					
[Other]		-	-					
Total Taxes	\$	121,333	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -
810 SOURCE OF SUPPLY								
11 Water S.O.S. - Regular Salaries	\$	18,061	\$ 18,624					
12 Overtime		861	2,676					
21 Personnel Benefits		4,960	5,988					
31 Office and Operating Supplies		8,533	6,000					
32 Fuel Consumed		12	100					
35 Small Tools and Minor Equipment		531	1,000					
41 Professional Services		28,853	10,332	205,000	10,000			
42 Communication		182	15,000					
43 Travel		-	-					
44 Advertising		-	500					
45 Operating Rentals and Leases		259	-					
48 Repairs & Maintenance		47,685	35,000					
49 Miscellaneous		3,027	-					
95 Interfund Operating Rentals & Leases		3,601	2,000					
Total Source of Supply	\$	116,565	\$ 97,219	\$ 205,000	\$ 10,000	\$ -	\$ -	\$ -



City of Camas Water Utility Input of Data and Assumptions

820 PUMPING

11	Water Pumping - Regular Salaries	\$	18,261	\$	18,618					
12	Overtime		1,940		442					
21	Personnel Benefits		5,288		5,374					
31	Office and Operating Supplies		3,023		2,100					
32	Fuel Consumed		96		-					
35	Small Tools and Minor Equipment		15		100					
41	Professional Services		236		9,000					
42	Communication		-		1,000					
43	Travel		-		200					
47	Public Utility		182,825		197,000					
48	Repairs & Maintenance		3,705		30,000					
49	Miscellaneous		-		2,000					
95	Interfund Operating Rentals & Leases		4,986		15,000					
	Total Pumping	\$	220,375	\$	280,834	\$	-	\$	-	\$

830 TREATMENT

11	Water Treatment - Regular Salaries	\$	18,056	\$	18,618					
12	Overtime		2,409		5,941					
21	Personnel Benefits		5,329		6,983					
31	Office and Operating Supplies		71,683		20,000					
32	Fuel Consumed		-		100					
35	Small Tools and Minor Equipment		8,763		15,000					
36	Supplies - Chemicals		62,804		135,000					
41	Professional Services		6,124		10,000	35,000	10,000			
42	Communication		2,973		500					
43	Travel		-		150					
45	Operating Rentals and Leases		1,142		200					
46	Insurance		-		37,452					
47	Public Utility		8,245		10,000					
48	Repairs & Maintenance		6,388		5,000					
49	Miscellaneous		155		11,000					
95	Interfund Operating Rentals & Leases		2,540		4,000					
	Total Treatment	\$	196,611	\$	279,943	\$	35,000	\$	10,000	\$



City of Camas Water Utility Input of Data and Assumptions

850 TRANSMISSION/DISTRIBUTION

11	Water Transmission/Distribution - Regular Salaries	\$ 98,394	\$ 83,851					
12	Overtime	12,561	16,009					
21	Personnel Benefits	27,478	28,514					
22	Uniforms and Clothing	-	-					
31	Office and Operating Supplies	39,604	45,000					
35	Small Tools and Minor Equipment	5,275	-					
41	Professional Services	7,670	10,000	55,000	10,000			
42	Communication	1,278	4,000					
43	Travel	1,069	1,000					
45	Operating Rentals and Leases	102	2,500					
47	Public Utility	200	5,000					
48	Repairs & Maintenance	29,357	42,000					
49	Miscellaneous	2,274	-					
95	Interfund Operating Rentals & Leases	52,717	42,000					
98	Interfund Repairs & Maintenance	-	2,000					
	Total Transmission/Distribution	\$ 277,979	\$ 281,874	\$ 55,000	\$ 10,000	\$ -	\$ -	\$ -

860 SERVICES

11	Water Services - Regular Salaries	\$ 79,647	\$ 80,581					
12	Overtime	71	-					
21	Personnel Benefits	21,244	22,629					
31	Office and Operating Supplies	3,068	2,500					
41	Professional Services	391	-					
45	Operating Rentals and Leases	603	-					
48	Repairs & Maintenance	2,350	-					
49	Miscellaneous	-	-					
95	Interfund Operating Rentals & Leases	2,996	4,000					
	Total Services	\$ 110,370	\$ 109,710	\$ -	\$ -	\$ -	\$ -	\$ -

870 METERS

11	Water Meters - Regular Salaries	\$ 79,683	\$ 112,537					
12	Overtime	198	-					
21	Personnel Benefits	21,362	30,993					
31	Office and Operating Supplies	11,938	20,000					
35	Small Tools and Minor Equipment	5,621	200					
42	Communication	-	-					
45	Operating Rentals and Leases	-	-					
48	Repairs & Maintenance	659	9,000					
	Total Meters	\$ 119,461	\$ 172,729	\$ -	\$ -	\$ -	\$ -	\$ -



City of Camas Water Utility Capital Improvement Program

Cost In Year: 2003

TOTAL FORECASTED PROJECT COSTS

Improvement Projects (Upgrades & Expansions)

Rank	Function	Current Cost	Year	Description	Life in Years	% Upgrade	% Expansion	Specific Funding Source	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
1	7	\$ 10,009	2003	Well Meter Upgrades	20	100%	0%	CALCULATED FUNDING	\$ -	\$ 10,009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,009
2	9	28,000	2003	3/4 Ton Utility Truck	5	0%	100%	CALCULATED FUNDING	-	28,000	-	-	-	-	-	-	28,000
3	2	30,000	2003	Gas to Liquid Chlorine Conversions, Wells 5,7	50	100%	0%	CALCULATED FUNDING	-	30,000	-	-	-	-	-	-	30,000
4	5	35,000	2003	Lacamas Shores PRVs	80	100%	0%	CALCULATED FUNDING	-	35,000	-	-	-	-	-	-	35,000
5	5	40,000	2003	Lower Prune Hill Pump Upsize/Meters	80	20%	80%	CALCULATED FUNDING	-	40,000	-	-	-	-	-	-	40,000
6	3	84,400	2003	D-4 PRV 280 Zone	50	100%	0%	CALCULATED FUNDING	-	84,400	-	-	-	-	-	-	84,400
7	4	128,000	2003	Upper Prune Hill Reservoir and Pump Station	80	50%	50%	CALCULATED FUNDING	-	128,000	-	-	-	-	-	-	128,000
8	5	268,000	2003	T-5 Gregg Booster	50	25%	75%	CALCULATED FUNDING	-	268,000	-	-	-	-	-	-	268,000
9	5	268,000	2003	T-5 Gregg Booster	50	25%	75%	DEVELOPER-FUNDED	-	268,000	-	-	-	-	-	-	268,000
10	4	5,000	2004	West Prune Hill Reservoir Site Appraisal	0	0%	100%	CALCULATED FUNDING	-	-	5,200	-	-	-	-	-	5,200
11	6	5,000	2004	Hydrant Storz Adapters	5	100%	0%	CALCULATED FUNDING	-	-	5,200	-	-	-	-	-	5,200
12	9	5,000	2004	Shoring Equipment	5	100%	0%	CALCULATED FUNDING	-	-	5,200	-	-	-	-	-	5,200
13	9	10,000	2004	Landscape Improvements	50	0%	100%	CALCULATED FUNDING	-	-	10,400	-	-	-	-	-	10,400
14	5	20,000	2004	Booster Station Meter Installation	20	0%	100%	CALCULATED FUNDING	-	-	20,800	-	-	-	-	-	20,800
15	2	20,000	2004	Gas to Liquid Chlorine Conversions, Wells 5,7	50	100%	0%	CALCULATED FUNDING	-	-	20,800	-	-	-	-	-	20,800
16	2	50,000	2004	Filter Plant Lab Expansion	50	0%	100%	CALCULATED FUNDING	-	-	52,000	-	-	-	-	-	52,000
17	5	50,000	2004	Chlor Plant Telemetry	10	100%	0%	CALCULATED FUNDING	-	-	52,000	-	-	-	-	-	52,000
18	4	200,000	2004	Upper Prune Hill Reservoir and Pump Station	80	50%	50%	CALCULATED FUNDING	-	-	208,000	-	-	-	-	-	208,000
19	9	210,000	2004	C-4 Irrigation Weather Station	50	0%	100%	CALCULATED FUNDING	-	-	218,400	-	-	-	-	-	218,400
20	1	300,000	2004	SR-8 Water Right Purchase	0	0%	100%	CALCULATED FUNDING	-	-	312,000	-	-	-	-	-	312,000
21	1	700,000	2004	Oak Park/SW Camas Well Field Expansion	50	50%	50%	CALCULATED FUNDING	-	-	728,000	-	-	-	-	-	728,000
22	3	67,000	2005	D-8 Main on Klickitat	80	100%	0%	CALCULATED FUNDING	-	-	-	72,467	-	-	-	-	72,467
23	1	500,000	2005	Source Development	50	100%	0%	CALCULATED FUNDING	-	-	-	540,800	-	-	-	-	540,800
24	1	600,000	2005	SR-8 West Well Development	50	0%	100%	CALCULATED FUNDING	-	-	-	648,960	-	-	-	-	648,960
25	3	1,004,500	2005	T-7 18" Washougal Crossing	80	0%	100%	CALCULATED FUNDING	-	-	-	1,086,467	-	-	-	-	1,086,467
26	1	1,923,500	2005	SR-12 Well #4 GWI	50	50%	50%	CALCULATED FUNDING	-	-	-	2,080,458	-	-	-	-	2,080,458
27	3	123,000	2006	D-10 8" Main NW Sierra	80	100%	0%	CALCULATED FUNDING	-	-	-	-	138,358	-	-	-	138,358
28	5	65,000	2007	T-3 New Pump Lacamas Booster	15	0%	100%	CALCULATED FUNDING	-	-	-	-	-	76,041	-	-	76,041
29	1	500,000	2007	SR-11 Water Right Development	0	0%	100%	CALCULATED FUNDING	-	-	-	-	-	584,929	-	-	584,929
30	3	1,342,900	2007	T-2 20" Main Lacamas Booster	80	25%	75%	CALCULATED FUNDING	-	-	-	-	-	1,571,003	-	-	1,571,003
31	5	54,000	2008	D-7 Booster St. on Couch	50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	65,699	-	65,699
32	9	100,000	2008	Water Plan Update	5	50%	50%	CALCULATED FUNDING	-	-	-	-	-	-	121,665	-	121,665
33	3	349,500	2009	S-3 12" Main West Side Res	80	0%	100%	CALCULATED FUNDING	-	-	-	-	-	-	-	442,229	442,229
34	4	2,500,000	2009	S-2 West Side Res	80	0%	100%	CALCULATED FUNDING	-	-	-	-	-	-	-	3,163,298	3,163,298
35	3	400,000	2010	D-11 12" Main 38th	80	0%	100%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
36	3	439,000	2010	D-11 12" Main 38th	80	0%	100%	DEVELOPER-FUNDED	-	-	-	-	-	-	-	-	-
37	5	488,800	2010	T-6 Forest Home Booster	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
38	3	484,000	2010	D-6 542 Zone Loop	80	25%	75%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
39	5	500,000	2010	T-6 Forest Home Booster	80	100%	0%	DEVELOPER-FUNDED	-	-	-	-	-	-	-	-	-
40	1	1,923,500	2006	SR-12 Well #4 GWI	50	50%	50%	CALCULATED FUNDING	-	-	-	-	2,163,676	-	-	-	2,163,676
41						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
42						0%	100%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
43						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
44						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
45						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
46						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
		\$ 15,841,109	Total Improvement Projects			\$ 5,060,934	\$ 10,780,175		\$ -	\$ 891,409	\$ 1,638,000	\$ 4,429,152	\$ 2,302,034	\$ 2,231,973	\$ 187,365	\$ 3,605,527	\$ 15,285,459



City of Camas Water Utility Capital Improvement Program

TOTAL FORECASTED PROJECT COSTS

Repair and Replacement Projects

Rank	Function	Current Cost	Year	Description	Life in Years	% Upgrade	% Expansion	Specific Funding Source	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
1	1	\$ 1,075,883	2003	Well #1 and #2 Replacement Wells	50	100%	0%	CALCULATED FUNDING	\$ -	\$ 1,075,883	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,075,883
2	7	10,000	2004	Large Meter Replacements	20	100%	0%	CALCULATED FUNDING	-	-	10,400	-	-	-	-	-	10,400
3	2	10,000	2004	Screen Chamber Fabric Replacement (ESA)	10	0%	100%	CALCULATED FUNDING	-	-	10,400	-	-	-	-	-	10,400
4	3	129,000	2004	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	134,160	-	-	-	-	-	134,160
5	3	198,000	2004	PWTF Water/Sewer Replacement	50	100%	0%	CALCULATED FUNDING	-	-	203,840	-	-	-	-	-	203,840
6	1	450,000	2004	Well #1 and #2 Replacement Wells	50	100%	0%	CALCULATED FUNDING	-	-	468,000	-	-	-	-	-	468,000
7	3	75,000	2005	Miscellaneous Water Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	81,120	-	-	-	-	81,120
8	3	75,000	2006	Miscellaneous Water Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	84,365	-	-	-	84,365
9	3	75,000	2007	Miscellaneous Main Repairs	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	87,739	-	-	87,739
10	3	75,000	2008	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	91,249	-	91,249
11	3	75,000	2009	Miscellaneous Water Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	94,899	94,899
12	3	75,000	2010	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
13	3	75,000	2011	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
14	3	75,000	2012	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
15	3	75,000	2013	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
16	3	75,000	2014	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
17	3	75,000	2015	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
18	3	75,000	2016	Miscellaneous Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
19						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
20						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
21						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
22						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
23						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
24						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
25						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
26						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
27						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
28						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
29						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
30						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
31						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
32						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
33						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
34						100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
		\$ 2,770,883	Total Repair & Replacement Projects						\$ -	\$ 1,075,883	\$ 826,800	\$ 81,120	\$ 84,365	\$ 87,739	\$ 91,249	\$ 94,899	\$ 2,342,055

\$ 18,611,992 Total Capital Costs \$ - \$ 1,967,292 \$ 2,464,800 \$ 4,510,272 \$ 2,386,399 \$ 2,319,713 \$ 278,614 \$ 3,700,425 \$ 17,627,514

Summary of Cost by Function - Upgrades & Expansions

Function	Description	Total Cost
1	Source of Supply	\$ 6,447,000
2	Treatment	100,000
3	Transmission & Distribution	4,304,300
4	Storage	2,833,000
5	Pumping	1,788,800
6	Hydrants	5,000
7	Meters	10,009
8	Services	-
9	General Plant	353,000
Total Capital Costs		\$ 15,841,109

Summary of Cost by Function and Year - Upgrades & Expansions

Function	Description	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
1	Source of Supply	\$ -	\$ -	\$ 1,040,000	\$ 3,270,218	\$ 2,163,676	\$ 584,929	\$ -	\$ -	\$ 7,058,823
2	Treatment	-	30,000	72,800	-	-	-	-	-	102,800
3	Transmission & Distribution	-	84,400	-	1,158,934	138,358	1,571,003	-	442,229	3,394,925
4	Storage	-	128,000	213,200	-	-	-	-	3,163,298	3,504,498
5	Pumping	-	611,000	72,800	-	-	76,041	65,699	-	825,540
6	Hydrants	-	-	5,200	-	-	-	-	-	5,200
7	Meters	-	10,009	-	-	-	-	-	-	10,009
8	Services	-	-	-	-	-	-	-	-	-
9	General Plant	-	28,000	234,000	-	-	-	121,665	-	383,665
		\$ -	\$ 891,409	\$ 1,638,000	\$ 4,429,152	\$ 2,302,034	\$ 2,231,973	\$ 187,365	\$ 3,605,527	\$ 15,285,459



City of Camas Water Utility Capital Funding Analysis

Summary of Expenditures	2002	2003	2004	2005	2006	2007	2008
WATER CAPITAL PROJECTS							
Improvement Upgrades	\$ -	\$ 365,409	\$ 551,200	\$ 1,653,496	\$ 1,220,196	\$ 392,751	\$ 126,532
Expansions	-	526,000	1,086,800	2,775,656	1,081,838	1,839,222	60,833
Repairs and Replacements	-	1,075,883	826,800	81,120	84,365	87,739	91,249
TOTAL CAPITAL EXPENDITURES	\$ -	\$ 1,967,292	\$ 2,464,800	\$ 4,510,272	\$ 2,386,399	\$ 2,319,713	\$ 278,614

Capital Financing Plan	2002	2003	2004	2005	2006	2007	2008
PROJECT-SPECIFIC FUNDING SOURCES							
Revenue Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CERB Loans	-	-	-	-	-	-	-
PWTF Loans	-	-	-	-	-	-	-
Developer Donations	-	268,000	-	-	-	-	-
Total Project-Specific Funding	\$ -	\$ 268,000	\$ -	\$ -	\$ -	\$ -	\$ -
Unfunded Capital Expenditures	-	1,699,292	2,464,800	4,510,272	2,386,399	2,319,713	278,614
OTHER FUNDING SOURCES							
Grants	-	19,533	-	-	-	-	-
System Development Charges	-	330,350	328,575	328,575	328,575	328,575	353,440
Interfund Loan Revenue	-	101,908	101,508	101,108	100,708	77,308	-
Other Debt Proceeds [Note A]	-	-	2,270,000	3,610,000	1,980,000	1,930,000	-
Capital Fund Balance	-	1,247,501	-	470,589	-	-	-
Rates	-	-	-	-	-	-	-
Total General Resources	\$ -	\$ 1,699,292	\$ 2,700,083	\$ 4,510,272	\$ 2,409,283	\$ 2,335,883	\$ 353,440

TOTAL CAPITAL RESOURCES	\$ -	\$ 1,967,292	\$ 2,700,083	\$ 4,510,272	\$ 2,409,283	\$ 2,335,883	\$ 353,440
Unfunded Capital Expenditures	-	-	-	-	-	-	-
Additions Req. to Meet Contingency	\$ -	\$ 192,225	\$ -	\$ -	\$ -	\$ -	\$ -
Minimum Debt Needed (Enter Below)	\$ -	\$ 192,225	\$ -	\$ -	\$ -	\$ -	\$ -

Make sure above line zeroes

NOTE A: OTHER DEBT OPTION

Specify debt instrument:

Revenue Bond							
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Enter amount needed for projects:

\$ -	\$ -	\$ 2,270,000	\$ 3,610,000	\$ 1,980,000	\$ 1,930,000
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City of Camas Water Utility Capital Funding Analysis

New Debt Computations	2002	2003	2004	2005	2006	2007	2008
REVENUE BONDS							
Amount to Fund	\$ -	\$ -	\$ 2,270,000	\$ 3,610,000	\$ 1,980,000	\$ 1,930,000	\$ -
Issuance Costs	-	-	50,458	80,868	44,354	43,234	-
Reserve Required	-	-	<u>202,444</u>	<u>352,521</u>	<u>193,350</u>	<u>188,467</u>	-
Amount of Debt Issue	\$ -	\$ -	\$ 2,522,902	\$ 4,043,389	\$ 2,217,704	\$ 2,161,701	\$ -
CERB LOANS							
Amount to Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Issuance Costs	-	-	-	-	-	-	-
Amount of Debt Issue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PWTF LOANS							
Amount to Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service Summary							
	2002	2003	2004	2005	2006	2007	2008
EXISTING DEBT SERVICE							
Annual Interest Payments	\$ 65,094	\$ 62,141	\$ 58,802	\$ 54,904	\$ 50,504	\$ 45,863	\$ 41,592
Annual Principal Payments	<u>55,699</u>	<u>65,864</u>	<u>72,992</u>	<u>94,223</u>	<u>98,211</u>	<u>104,074</u>	<u>77,445</u>
Total Debt Service Payments	\$ 120,793	\$ 128,005	\$ 131,794	\$ 149,127	\$ 148,715	\$ 149,937	\$ 119,037
Revenue Bond Payments Only	62,032	69,243	73,033	90,366	89,953	91,176	60,276
NEW DEBT SERVICE							
Annual Interest Payments	\$ -	\$ -	\$ 126,145	\$ 364,933	\$ 487,395	\$ 602,283	\$ 583,096
Annual Principal Payments	-	-	<u>76,299</u>	<u>190,032</u>	<u>260,920</u>	<u>334,499</u>	<u>353,685</u>
Total Debt Service Payments	\$ -	\$ -	\$ 202,444	\$ 554,965	\$ 748,315	\$ 936,782	\$ 936,782
Revenue Bond Payments Only	-	-	202,444	554,965	748,315	936,782	936,782
TOTAL DEBT SERVICE PAYMENTS	\$ 120,793	\$ 128,005	\$ 334,238	\$ 704,092	\$ 897,030	\$ 1,086,719	\$ 1,055,819
Total Interest Payments	65,094	62,141	184,947	419,837	537,899	648,146	624,688
Total Principal Payments	55,699	65,864	149,291	284,255	359,131	438,573	431,130
Total Revenue Bond Payments Only	62,032	69,243	275,477	645,331	838,268	1,027,958	997,058



City of Camas Water Utility Operating Revenue and Expenditure Forecast

Actual

Revenues	FORECAST BASIS	2002	2003	2004	2005	2006	2007	2008
REVENUES								
Water Sales	<i>Customer Growth by Class</i>	\$ 2,059,090	\$ 2,162,288	\$ 2,260,515	\$ 2,358,742	\$ 2,456,969	\$ 2,555,196	\$ 2,659,832
Fire Protection (Public & Private)	<i>No Growth</i>	27,493	28,300	28,300	28,300	28,300	28,300	28,300
Hookup Fees (other than SDCs)	<i>Customer Growth</i>	51,100	40,000	41,817	43,634	45,451	47,268	49,204
Miscellaneous Revenues	<i>No Growth</i>	58,156	52,950	52,950	52,950	52,950	52,950	52,950
TOTAL REVENUE		\$ 2,195,839	\$ 2,283,538	\$ 2,383,582	\$ 2,483,626	\$ 2,583,670	\$ 2,683,715	\$ 2,790,286

Expenditures	FORECAST BASIS	2002	2003	2004	2005	2006	2007	2008
WATER FUND								
100 TAXES								
53 External Taxes & Operational Assessments	<i>Excise & B&O Tax</i>	\$ 121,333	\$ 116,514	\$ 121,455	\$ 126,422	\$ 131,389	\$ 136,356	\$ 142,020
[Other]		-	-	-	-	-	-	-
Total Taxes		\$ 121,333	\$ 116,514	\$ 121,455	\$ 126,422	\$ 131,389	\$ 136,356	\$ 142,020
810 SOURCE OF SUPPLY								
11 Water S.O.S. - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 18,061	\$ 18,624	\$ 19,182	\$ 19,758	\$ 20,351	\$ 20,961	\$ 21,590
12 Overtime	<i>Labor Cost Inflation</i>	861	2,676	2,756	2,839	2,924	3,012	3,102
21 Personnel Benefits	<i>Labor Cost Inflation</i>	4,960	5,988	6,167	6,352	6,543	6,739	6,941
31 Office and Operating Supplies	<i>General Inflation + Growth</i>	8,533	6,000	6,453	6,927	7,423	7,942	8,506
32 Fuel Consumed	<i>General Inflation + Growth</i>	12	100	108	115	124	132	142
35 Small Tools and Minor Equipment	<i>General Cost Inflation</i>	531	1,000	1,030	1,061	1,093	1,126	1,159
41 Professional Services	<i>General Cost Inflation</i>	28,853	10,332	205,000	10,000	10,300	10,609	10,927
42 Communication	<i>General Cost Inflation</i>	182	15,000	15,450	15,914	16,391	16,883	17,389
43 Travel	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
44 Advertising	<i>General Cost Inflation</i>	-	500	515	530	546	563	580
45 Operating Rentals and Leases	<i>General Cost Inflation</i>	259	-	-	-	-	-	-
48 Repairs & Maintenance	<i>General Cost Inflation</i>	47,685	35,000	36,050	37,132	38,245	39,393	40,575
49 Miscellaneous	<i>General Cost Inflation</i>	3,027	-	-	-	-	-	-
95 Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	3,601	2,000	2,060	2,122	2,185	2,251	2,319
Total Source of Supply		\$ 116,565	\$ 97,219	\$ 294,771	\$ 102,749	\$ 106,125	\$ 109,610	\$ 113,229



City of Camas Water Utility Operating Revenue and Expenditure Forecast

Actual

820 PUMPING

11	Water Pumping - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 18,261	\$ 18,618	\$ 19,177	\$ 19,752	\$ 20,344	\$ 20,955	\$ 21,583
12	Overtime	<i>Labor Cost Inflation</i>	1,940	442	455	469	483	497	512
21	Personnel Benefits	<i>Labor Cost Inflation</i>	5,288	5,374	5,536	5,702	5,873	6,049	6,230
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	3,023	2,100	2,258	2,424	2,598	2,780	2,977
32	Fuel Consumed	<i>General Inflation + Growth</i>	96	-	-	-	-	-	-
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	15	100	103	106	109	113	116
41	Professional Services	<i>General Cost Inflation</i>	236	9,000	9,270	9,548	9,835	10,130	10,433
42	Communication	<i>General Cost Inflation</i>	-	1,000	1,030	1,061	1,093	1,126	1,159
43	Travel	<i>General Cost Inflation</i>	-	200	206	212	219	225	232
47	Public Utility	<i>General Inflation + Growth</i>	182,825	197,000	211,859	227,421	243,714	260,769	279,271
48	Repairs & Maintenance	<i>General Cost Inflation</i>	3,705	30,000	30,900	31,827	32,782	33,765	34,778
49	Miscellaneous	<i>General Cost Inflation</i>	-	2,000	2,060	2,122	2,185	2,251	2,319
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	<u>4,986</u>	<u>15,000</u>	<u>15,450</u>	<u>15,914</u>	<u>16,391</u>	<u>16,883</u>	<u>17,389</u>
	Total Pumping		\$ 220,375	\$ 280,834	\$ 298,304	\$ 316,557	\$ 335,626	\$ 355,542	\$ 377,000

830 TREATMENT

11	Water Treatment - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 18,056	\$ 18,618	\$ 19,177	\$ 19,752	\$ 20,345	\$ 20,955	\$ 21,584
12	Overtime	<i>Labor Cost Inflation</i>	2,409	5,941	6,119	6,302	6,492	6,686	6,887
21	Personnel Benefits	<i>Labor Cost Inflation</i>	5,329	6,983	7,192	7,408	7,630	7,859	8,095
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	71,683	20,000	21,509	23,088	24,743	26,474	28,352
32	Fuel Consumed	<i>General Inflation + Growth</i>	-	100	108	115	124	132	142
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	8,763	15,000	15,450	15,914	16,391	16,883	17,389
36	Supplies - Chemicals	<i>General Inflation + Growth</i>	62,804	135,000	145,183	155,847	167,012	178,700	191,378
41	Professional Services	<i>General Cost Inflation</i>	6,124	10,000	35,000	10,000	10,300	10,609	10,927
42	Communication	<i>General Cost Inflation</i>	2,973	500	515	530	546	563	580
43	Travel	<i>General Cost Inflation</i>	-	150	155	159	164	169	174
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	1,142	200	206	212	219	225	232
46	Insurance	<i>General Cost Inflation</i>	-	37,452	38,575	39,732	40,924	42,152	43,417
47	Public Utility	<i>General Inflation + Growth</i>	8,245	10,000	35,754	13,381	14,339	15,343	16,431
48	Repairs & Maintenance	<i>General Cost Inflation</i>	6,388	5,000	5,150	5,305	5,464	5,628	5,796
49	Miscellaneous	<i>General Cost Inflation</i>	155	11,000	11,330	11,670	12,020	12,381	12,752
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	<u>2,540</u>	<u>4,000</u>	<u>4,120</u>	<u>4,244</u>	<u>4,371</u>	<u>4,502</u>	<u>4,637</u>
	Total Treatment		\$ 196,611	\$ 279,943	\$ 345,541	\$ 313,659	\$ 331,082	\$ 349,259	\$ 368,773



City of Camas Water Utility Operating Revenue and Expenditure Forecast

Actual

850 TRANSMISSION/DISTRIBUTION

11	Water Transmission/Distribution - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 98,394	\$ 83,851	\$ 86,367	\$ 88,958	\$ 91,627	\$ 94,376	\$ 97,207
12	Overtime	<i>Labor Cost Inflation</i>	12,561	16,009	16,489	16,984	17,494	18,018	18,559
21	Personnel Benefits	<i>Labor Cost Inflation</i>	27,478	28,514	29,369	30,250	31,158	32,093	33,055
22	Uniforms and Clothing	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	39,604	45,000	48,394	51,949	55,671	59,567	63,793
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	5,275	-	-	-	-	-	-
41	Professional Services	<i>General Cost Inflation</i>	7,670	10,000	55,000	10,000	10,300	10,609	10,927
42	Communication	<i>General Cost Inflation</i>	1,278	4,000	4,120	4,244	4,371	4,502	4,637
43	Travel	<i>General Cost Inflation</i>	1,069	1,000	1,030	1,061	1,093	1,126	1,159
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	102	2,500	2,575	2,652	2,732	2,814	2,898
47	Public Utility	<i>General Inflation + Growth</i>	200	5,000	5,377	5,772	6,186	6,619	7,088
48	Repairs & Maintenance	<i>General Cost Inflation</i>	29,357	42,000	43,260	44,558	45,895	47,271	48,690
49	Miscellaneous	<i>General Cost Inflation</i>	2,274	-	-	-	-	-	-
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	52,717	42,000	43,260	44,558	45,895	47,271	48,690
98	Interfund Repairs & Maintenance	<i>General Cost Inflation</i>	-	2,000	2,060	2,122	2,185	2,251	2,319
	Total Transmission/Distribution		\$ 277,979	\$ 281,874	\$ 337,302	\$ 303,108	\$ 314,605	\$ 326,516	\$ 339,022

860 SERVICES

11	Water Services - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 79,647	\$ 80,581	\$ 82,999	\$ 85,489	\$ 88,053	\$ 90,695	\$ 93,416
12	Overtime	<i>Labor Cost Inflation</i>	71	-	-	-	-	-	-
21	Personnel Benefits	<i>Labor Cost Inflation</i>	21,244	22,629	23,307	24,007	24,727	25,469	26,233
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	3,068	2,500	2,689	2,886	3,093	3,309	3,544
41	Professional Services	<i>General Cost Inflation</i>	391	-	-	-	-	-	-
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	603	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	2,350	-	-	-	-	-	-
49	Miscellaneous	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	2,996	4,000	4,120	4,244	4,371	4,502	4,637
	Total Services		\$ 110,370	\$ 109,710	\$ 113,115	\$ 116,625	\$ 120,244	\$ 123,975	\$ 127,830



City of Camas Water Utility Operating Revenue and Expenditure Forecast

Actual

870 METERS

11	Water Meters - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 79,683	\$ 112,537	\$ 115,913	\$ 119,390	\$ 122,972	\$ 126,661	\$ 130,461
12	Overtime	<i>Labor Cost Inflation</i>	198	-	-	-	-	-	-
21	Personnel Benefits	<i>Labor Cost Inflation</i>	21,362	30,993	31,922	32,880	33,866	34,882	35,929
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	11,938	20,000	21,509	23,088	24,743	26,474	28,352
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	5,621	200	206	212	219	225	232
42	Communication	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	659	9,000	9,270	9,548	9,835	10,130	10,433
	Total Meters		\$ 119,461	\$ 172,729	\$ 178,820	\$ 185,119	\$ 191,634	\$ 198,372	\$ 205,407

538-100 ADMINISTRATION/GENERAL (50%)

11	Administration/General - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 43,909	\$ 45,396	\$ 46,758	\$ 48,161	\$ 49,606	\$ 51,094	\$ 52,627
12	Overtime	<i>Labor Cost Inflation</i>	322	-	-	-	-	-	-
21	Personnel Benefits	<i>Labor Cost Inflation</i>	11,415	10,232	10,539	10,855	11,181	11,516	11,862
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	1,243	1,500	1,613	1,732	1,856	1,986	2,126
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	1,082	4,200	4,326	4,456	4,589	4,727	4,869
41	Professional Services	<i>General Cost Inflation</i>	10,175	1,600	50,000	5,000	5,150	5,305	5,464
42	Communication	<i>General Cost Inflation</i>	3,554	4,500	4,635	4,774	4,917	5,065	5,217
43	Travel	<i>General Cost Inflation</i>	661	500	515	530	546	563	580
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	1,250	1,000	1,030	1,061	1,093	1,126	1,159
46	Insurance	<i>General Cost Inflation</i>	49,427	-	-	-	-	-	-
47	Public Utility	<i>General Inflation + Growth</i>	59	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
49	Miscellaneous	<i>General Cost Inflation</i>	16,627	11,000	11,330	11,670	12,020	12,381	12,752
91	Interfund Professional Services	<i>General Cost Inflation</i>	203,656	158,953	173,460	178,664	184,024	189,544	195,231
91A	Customer Billing (IF Prof Svcs - Acctg)	<i>General Inflation + Growth</i>	-	51,439	56,134	60,257	64,574	69,093	73,995
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	41,267	45,000	46,350	47,741	49,173	50,648	52,167
	Total Administration/General		\$ 384,645	\$ 335,320	\$ 406,691	\$ 374,901	\$ 388,729	\$ 403,047	\$ 418,049



City of Camas Water Utility Operating Revenue and Expenditure Forecast

Actual

538-170 CUSTOMER SERVICE (50%)

11	Administration/General - Regular Salaries	<i>Labor Cost Inflation</i>	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
12	Overtime	<i>Labor Cost Inflation</i>	-	-	-	-	-	-	-	-	-	-	-	-
21	Personnel Benefits	<i>Labor Cost Inflation</i>	-	-	-	-	-	-	-	-	-	-	-	-
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	2,676	1,000	1,075	1,154	1,237	1,324	1,418					
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	2,517	2,000	2,060	2,122	2,185	2,251	2,319					
41	Professional Services	<i>General Cost Inflation</i>	5,093	11,000	31,000	16,930	17,438	17,961	18,500					
42	Communication	<i>General Cost Inflation</i>	194	250	258	265	273	281	290					
43	Travel	<i>General Cost Inflation</i>	117	100	103	106	109	113	116					
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	-	-	-	-	-	-	-					
48	Repairs & Maintenance	<i>General Cost Inflation</i>	1,844	1,000	1,030	1,061	1,093	1,126	1,159					
49	Miscellaneous	<i>General Cost Inflation</i>	100	1,750	1,803	1,857	1,912	1,970	2,029					
91	Interfund Professional Services	<i>General Inflation + Growth</i>	-	6,000	6,453	6,927	7,423	7,942	8,506					
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	2,850	4,000	4,120	4,244	4,371	4,502	4,637					
	Total Customer Service		\$ 15,388	\$ 27,100	\$ 47,901	\$ 34,665	\$ 36,042	\$ 37,469	\$ 38,973					
TOTAL WATER FUND BUDGET			\$ 1,562,727	\$ 1,701,244	\$ 2,143,899	\$ 1,873,804	\$ 1,955,475	\$ 2,040,146	\$ 2,130,302					

534 30 DEPRECIATION EXPENSE

Depreciation Expense [a]	<i>Calc'd from "Input" and "Capital"</i>	\$	721,145	\$	764,308	\$	812,494	\$	893,399	\$	896,183	\$	921,987	\$	923,127
TOTAL EXPENSES		\$	2,283,871	\$	2,465,553	\$	2,956,393	\$	2,767,203	\$	2,851,658	\$	2,962,132	\$	3,053,429
less: Depreciation (Non-Cash Expense)			<u>(721,145)</u>		<u>(764,308)</u>		<u>(812,494)</u>		<u>(893,399)</u>		<u>(896,183)</u>		<u>(921,987)</u>		<u>(923,127)</u>
CASH OPERATING EXPENDITURES		\$	1,562,727	\$	1,701,244	\$	2,143,899	\$	1,873,804	\$	1,955,475	\$	2,040,146	\$	2,130,302



City of Camas Water Utility Revenue Requirements Analysis

Cash Flow Sufficiency Test	2002	2003	2004	2005	2006	2007	2008
EXPENSES							
Cash Operating Expenses	\$ 1,562,727	\$ 1,701,244	\$ 2,143,899	\$ 1,873,804	\$ 1,955,475	\$ 2,040,146	\$ 2,130,302
Existing Debt Service	120,793	128,005	131,794	149,127	148,715	149,937	119,037
New Debt Service	-	-	202,444	554,965	748,315	936,782	936,782
Interfund Loan Repayment (to other funds)	-	-	-	-	-	-	-
Rate-Funded Capital Improvement Program	-	-	-	-	-	-	-
Depreciation Funding	-	-	-	-	-	-	-
Additions Required to Meet Minimum Working Capital	-	-	-	-	13,425	13,919	14,820
Total Expenses	\$ 1,683,520	\$ 1,829,249	\$ 2,478,137	\$ 2,577,897	\$ 2,865,930	\$ 3,140,783	\$ 3,200,941
REVENUES							
Water Sales	\$ 2,059,090	\$ 2,162,288	\$ 2,260,515	\$ 2,358,742	\$ 2,456,969	\$ 2,555,196	\$ 2,659,832
Fire Protection	27,493	28,300	28,300	28,300	28,300	28,300	28,300
Other Revenue	109,256	92,950	94,767	96,584	98,401	100,218	102,154
Operating Fund Interest Earnings	-	11,911	21,235	50,568	44,553	52,824	60,919
Use of Reserves	-	-	-	-	-	-	-
Total Revenue	\$ 2,195,839	\$ 2,295,449	\$ 2,404,817	\$ 2,534,194	\$ 2,628,223	\$ 2,736,538	\$ 2,851,205
CASH TEST REVENUE DEFICIENCY (SURPLUS)	\$ (512,319)	\$ (466,200)	\$ 73,320	\$ 43,702	\$ 237,707	\$ 404,244	\$ 349,736
Coverage Sufficiency Test							
	2002	2003	2004	2005	2006	2007	2008
EXPENSES							
Cash Operating Expenses	\$ 1,562,727	\$ 1,701,244	\$ 2,143,899	\$ 1,873,804	\$ 1,955,475	\$ 2,040,146	\$ 2,130,302
Revenue Bond Debt Service	62,032	69,243	275,477	645,331	838,268	1,027,958	997,058
Revenue Bond Coverage Requirement:	1.4 24,813	27,697	110,191	258,133	335,307	411,183	398,823
Total Expenses	\$ 1,649,571	\$ 1,798,185	\$ 2,529,567	\$ 2,777,268	\$ 3,129,050	\$ 3,479,286	\$ 3,526,183
ALLOWABLE REVENUES							
Water Sales	\$ 2,059,090	\$ 2,162,288	\$ 2,260,515	\$ 2,358,742	\$ 2,456,969	\$ 2,555,196	\$ 2,659,832
Fire Protection		28,300	28,300	28,300	28,300	28,300	28,300
Other Revenue	109,256	92,950	94,767	96,584	98,401	100,218	102,154
System Development Charges	471,194	330,350	328,575	328,575	328,575	328,575	353,440
Interest Earnings - All Funds	-	43,559	28,566	74,933	72,497	82,802	92,743
Total Revenue	\$ 2,639,540	\$ 2,657,447	\$ 2,740,723	\$ 2,887,135	\$ 2,984,743	\$ 3,095,091	\$ 3,236,470
Coverage Realized	17.36	13.81	2.17	1.57	1.23	1.03	1.11
COVERAGE TEST REVENUE DEFICIENCY (SURPLUS)	\$ (989,968)	\$ (859,262)	\$ (211,156)	\$ (109,867)	\$ 144,307	\$ 384,195	\$ 289,713



City of Camas Water Utility Revenue Requirements Analysis

Rate Increase Required	2002	2003	2004	2005	2006	2007	2008
Maximum Deficiency From Tests	\$ -	\$ -	\$ 73,320	\$ 43,702	\$ 237,707	\$ 404,244	\$ 349,736
Net Revenue From Prior Rate Increases	-	-	-	76,506	79,692	247,210	420,798
Revenue Deficiency	\$ -	\$ -	\$ 73,320	\$ -	\$ 158,015	\$ 157,035	\$ -
Plus: Adjustment for State Excise Tax	-	-	3,882	-	8,367	8,315	-
Total Revenue Deficiency	\$ -	\$ -	\$ 77,202	\$ -	\$ 166,382	\$ 165,350	\$ -
Rate Revenue Before Rate Increase (Incl. previous increases)	\$ 2,059,090	\$ 2,162,288	\$ 2,260,515	\$ 2,439,299	\$ 2,540,881	\$ 2,815,497	\$ 3,102,913
Required Annual Rate Increase	0.00%	0.00%	3.42%	0.00%	6.55%	5.87%	0.00%
Number of Months New Rates Will Be In Effect	12	12	12	12	12	12	12
<i>Info: Percentage Increase to Generate Required Revenue</i>	<i>0.00%</i>	<i>0.00%</i>	<i>3.42%</i>	<i>0.00%</i>	<i>6.55%</i>	<i>5.87%</i>	<i>0.00%</i>
Policy Induced Rate Increases							
ANNUAL RATE INCREASE	0.00%	0.00%	3.42%	0.00%	6.55%	5.87%	0.00%
CUMULATIVE RATE INCREASE	0.00%	0.00%	3.42%	3.42%	10.19%	16.66%	16.66%
Full Year Rate Revenues After Rate Increase	\$ 2,059,090	\$ 2,162,288	\$ 2,337,717	\$ 2,439,299	\$ 2,707,263	\$ 2,980,847	\$ 3,102,913
Net Cash Flow After Rate Increase	512,319	466,200	(0)	32,803	13,425	13,919	85,883
Coverage After Rate Increase	17.36	13.81	2.43	1.69	1.51	1.42	1.53



City of Camas Water Utility Revenue Requirements Analysis

	2002	2003	2004	2005	2006	2007	2008
Projected Rate Revenues w/o Any Rate Increase	\$ 2,059,090	\$ 2,162,288	\$ 2,260,515	\$ 2,358,742	\$ 2,456,969	\$ 2,555,196	\$ 2,659,832
Additional Revenues From 2002 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2003 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2004 Rate Increase	-	-	77,202	80,557	83,911	87,266	90,840
Additional Revenues From 2005 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2006 Rate Increase	-	-	-	-	166,382	173,034	180,120
Additional Revenues From 2007 Rate Increase	-	-	-	-	-	165,350	172,121
Additional Revenues From 2008 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2009 Rate Increase	-	-	-	-	-	-	-
Total Additional Revenues From Rate Increases	\$ -	\$ -	\$ 77,202	\$ 80,557	\$ 250,294	\$ 425,650	\$ 443,081
EFFECTIVE RATE REVENUES AFTER RATE INCREASE	\$ 2,059,090	\$ 2,162,288	\$ 2,337,717	\$ 2,439,299	\$ 2,707,263	\$ 2,980,847	\$ 3,102,913
<i>Adjustment for Partial Year Increase</i>	-	-	-	-	-	-	-
Additional State Excise Taxes							
Additional State Excise Taxes From 2002 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2003 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2004 Rate Increase	-	-	3,882	4,051	4,220	4,389	4,568
Additional State Excise Taxes From 2005 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2006 Rate Increase	-	-	-	-	8,367	8,702	9,058
Additional State Excise Taxes From 2007 Rate Increase	-	-	-	-	-	8,315	8,656
Additional State Excise Taxes From 2008 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2009 Rate Increase	-	-	-	-	-	-	-
Total Additional State Excise taxes From Rate Increases	\$ -	\$ -	\$ 3,882	\$ 4,051	\$ 12,587	\$ 21,406	\$ 22,283
Memorandum Items:							
Annual Growth Rate	0.00%	5.01%	4.54%	4.35%	4.16%	4.00%	4.10%
State Excise Tax Rate	5.03%	5.03%	5.03%	5.03%	5.03%	5.03%	5.03%



City of Camas Water Utility Revenue Requirements Analysis

Fund Activity	2002	2003	2004	2005	2006	2007	2008
OPERATING FUND							
Beginning Balance	\$ -	\$ 344,733	\$ 810,932	\$ 810,932	\$ 308,023	\$ 321,448	\$ 335,366
plus: Net Cash Flow after Rate Increase	-	466,200	(0)	32,803	13,425	13,919	85,883
less: Transfer of Surplus to Capital Fund	-	-	-	(535,713)	-	-	(71,063)
Ending Balance	\$ 344,733	\$ 810,932	\$ 810,932	\$ 308,023	\$ 321,448	\$ 335,366	\$ 350,187
<i>Minimum Working Capital</i>		279,657	352,422	308,023	321,448	335,366	350,187
<i>Info: No of Days of Cash Operating Expenses</i>		174	138	60	60	60	60
CAPITAL FUND							
Beginning Balance	\$ -	\$ 1,582,370	\$ 366,516	\$ 609,130	\$ 698,619	\$ 749,448	\$ 795,596
plus: Depreciation Funding	-	-	-	-	-	-	-
plus: Developer Donations	-	268,000	-	-	-	-	-
plus: System Development Charges	-	330,350	328,575	328,575	328,575	328,575	353,440
plus: Grant Proceeds	-	19,533	-	-	-	-	-
plus: Net Debt Proceeds Available for Projects	-	-	2,270,000	3,610,000	1,980,000	1,930,000	-
plus: Interfund Loan Repayment	-	101,908	101,508	101,108	100,708	77,308	-
plus: Interest Earnings	-	31,647	7,330	24,365	27,945	29,978	31,824
plus: Transfer of Surplus from Operating Fund	-	-	-	535,713	-	-	71,063
less: Capital Fund Expenditures	-	(1,967,292)	(2,464,800)	(4,510,272)	(2,386,399)	(2,319,713)	(278,614)
Ending Balance	\$ 1,582,370	\$ 366,516	\$ 609,130	\$ 698,619	\$ 749,448	\$ 795,596	\$ 973,309
<i>Minimum Balance (Contingency)</i>	\$ -	\$ 558,741	\$ 608,037	\$ 698,243	\$ 745,971	\$ 792,365	\$ 797,937
BOND RESERVE							
Beginning Balance	\$ -	\$ 250,829	\$ 250,829	\$ 453,273	\$ 805,794	\$ 999,144	\$ 1,187,611
plus: Reserve Funding from New Debt	-	-	202,444	352,521	193,350	188,467	-
Ending Balance	\$ 250,829	\$ 250,829	\$ 453,273	\$ 805,794	\$ 999,144	\$ 1,187,611	\$ 1,187,611
<i>Minimum Reserve Balance</i>	-	250,829	453,273	805,794	999,144	1,187,611	1,187,611



City of Camas Water Utility

Summary of Revenue Requirements		2003	2004	2005	2006	2007	2008
SOURCES							
Rate Revenues Before Increase		\$ 2,162,288	\$ 2,260,515	\$ 2,358,742	\$ 2,456,969	\$ 2,555,196	\$ 2,659,832
Fire Protection (Public & Private)		28,300	28,300	28,300	28,300	28,300	28,300
Interest Earnings		11,911	21,235	50,568	44,553	52,824	60,919
Other Revenues		<u>92,950</u>	<u>94,767</u>	<u>96,584</u>	<u>98,401</u>	<u>100,218</u>	<u>102,154</u>
TOTAL SOURCES		\$ 2,295,449	\$ 2,404,817	\$ 2,534,194	\$ 2,628,223	\$ 2,736,538	\$ 2,851,205
USES							
Functional							
Taxes		\$ 116,514	\$ 121,455	\$ 126,422	\$ 131,389	\$ 136,356	\$ 142,020
Source of Supply		97,219	294,771	102,749	106,125	109,610	113,229
Pumping		280,834	298,304	316,557	335,626	355,542	377,000
Treatment		279,943	345,541	313,659	331,082	349,259	368,773
Transmission & Distribution		281,874	337,302	303,108	314,605	326,516	339,022
Services		109,710	113,115	116,625	120,244	123,975	127,830
Meters		172,729	178,820	185,119	191,634	198,372	205,407
Administration/Interfund/Customer Service		<u>362,420</u>	<u>454,592</u>	<u>409,566</u>	<u>424,771</u>	<u>440,516</u>	<u>457,021</u>
Total Functional Uses		\$ 1,701,244	\$ 2,143,899	\$ 1,873,804	\$ 1,955,475	\$ 2,040,146	\$ 2,130,302
Debt Service							
Existing		\$ 128,005	\$ 131,794	\$ 149,127	\$ 148,715	\$ 149,937	\$ 119,037
New		-	<u>202,444</u>	<u>554,965</u>	<u>748,315</u>	<u>936,782</u>	<u>936,782</u>
Total Debt Service		\$ 128,005	\$ 334,238	\$ 704,092	\$ 897,030	\$ 1,086,719	\$ 1,055,819
Additions to Reserve		\$ -	\$ -	\$ -	\$ 13,425	\$ 13,919	\$ 14,820
TOTAL USES		\$ 1,829,249	\$ 2,478,137	\$ 2,577,897	\$ 2,865,930	\$ 3,140,783	\$ 3,200,941
INCREASE CALCULATION							
Rate Revenue Including Previous Increases		\$ 2,162,288	\$ 2,260,515	\$ 2,439,299	\$ 2,540,881	\$ 2,815,497	\$ 3,102,913
Total Annual Revenue Deficiency*		-	<u>77,202</u>	-	<u>166,382</u>	<u>165,350</u>	-
RATE REVENUE AFTER INCREASES		\$ 2,162,288	\$ 2,337,717	\$ 2,439,299	\$ 2,707,263	\$ 2,980,847	\$ 3,102,913
Annual Rate Increase		0.00%	3.42%	0.00%	6.55%	5.87%	0.00%
Cumulative Rate Increase		0.00%	3.42%	3.42%	10.19%	16.66%	16.66%

*After Excise Tax adjustment



City of Camas Water Utility

WATER UTILITY

Summary of Capital Funding

	2003	2004	2005	2006	2007	2008
PROJECT COSTS						
Improvement Upgrades	\$ 365,409	\$ 551,200	\$ 1,653,496	\$ 1,220,196	\$ 392,751	\$ 126,532
Expansions	526,000	1,086,800	2,775,656	1,081,838	1,839,222	60,833
Repairs & Replacements	<u>1,075,883</u>	<u>826,800</u>	<u>81,120</u>	<u>84,365</u>	<u>87,739</u>	<u>91,249</u>
TOTAL PROJECT COSTS	\$ 1,967,292	\$ 2,464,800	\$ 4,510,272	\$ 2,386,399	\$ 2,319,713	\$ 278,614
SOURCES OF FUNDING						
Developer Contributions	\$ 268,000	\$ -	\$ -	\$ -	\$ -	\$ -
Grants	19,533	-	-	-	-	-
System Development Charges	330,350	328,575	328,575	328,575	328,575	353,440
Interfund Loan Proceeds	101,908	101,508	101,108	100,708	77,308	-
Cash Balances	1,247,501	-	470,589	-	-	-
New Debt Proceeds	-	<u>2,270,000</u>	<u>3,610,000</u>	<u>1,980,000</u>	<u>1,930,000</u>	-
TOTAL SOURCES OF FUNDING	\$ 1,967,292	\$ 2,700,083	\$ 4,510,272	\$ 2,409,283	\$ 2,335,883	\$ 353,440
<i>Total New Debt Issued</i>	\$ -	\$ 2,522,902	\$ 4,043,389	\$ 2,217,704	\$ 2,161,701	\$ -



City of Camas Water Utility Functional Allocations

Allocation of Plant-in-Service

PLANT-IN-SERVICE	TOTAL COSTS	FUNCTIONS OF WATER SERVICE					AS ALL OTHERS	TOTAL	ALLOCATION BASIS
		CUSTOMER BILLS	METERS & SERVICES	BASE	PEAK	FIRE PROTECTION			
Source of Supply	\$ 1,832,492	0.00%	0.00%	52.63%	47.37%	0.00%	0.00%	100.00%	2001 WSCP
Treatment	1,001,238	0.00%	0.00%	52.63%	47.37%	0.00%	0.00%	100.00%	2001 WSCP
Transmission & Distribution	11,043,761	0.00%	0.00%	47.37%	42.63%	10.00%	0.00%	100.00%	10% Fire, Remaining Peak/Average
Storage	3,018,573	0.00%	0.00%	41.03%	25.89%	33.08%	0.00%	100.00%	See Table Below
Pumping	2,906,640	0.00%	0.00%	47.37%	42.63%	10.00%	0.00%	100.00%	10% Fire, Remaining Peak/Average
Hydrants	692,265	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	All to Fire Protection
Meters	191,381	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	All to Meters & Services
Services	4,066,497	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	All to Meters & Services
General Plant	1,216,919	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	All As All Other
Total Utility Plant	\$ 25,969,766	\$ -	\$ 4,257,878	\$ 9,338,161	\$ 8,071,052	\$ 3,085,756	\$ 1,216,919	\$ 25,969,766	
Water Service Functions		0.00%	17.20%	37.73%	32.61%	12.47%		100.00%	
Allocation of "As All Others"		\$ -	\$ 209,329	\$ 459,090	\$ 396,795	\$ 151,704	\$ (1,216,919)	\$ -	
TOTAL	\$ 25,969,766	\$ -	\$ 4,467,207	\$ 9,797,251	\$ 8,467,847	\$ 3,237,461	\$ -	\$ 25,969,766	
Allocation Percentages	100.00%	0.00%	17.20%	37.73%	32.61%	12.47%	0.00%	100.00%	

Allocation of Storage

Function	MILLION GALLONS OF STORAGE	FUNCTIONS OF WATER SERVICE					AS ALL OTHERS	TOTAL	ALLOCATION BASIS
		CUSTOMER BILLS	METERS & SERVICES	BASE	PEAK	FIRE PROTECTION			
Operational	0.81	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	Total 2006 Storage Requirement, All to Base
Equalizing	0.30	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	Total 2006 Storage Requirement, All to Peak
Emergency (Standby)*	3.99	0.00%	0.00%	52.63%	47.37%	0.00%	0.00%	100.00%	Total 2006 Storage Requirement, Peak/Average
Fire Suppression	2.80	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	Total 2006 Storage Requirement, All to Fire Suppr.
Dead Storage	0.56	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	Total 2006 Storage Requirement, All to Base
TOTAL STORAGE	8.45	0.00%	0.00%	41.03%	25.89%	33.08%	0.00%	100.00%	

* Emergency & Fire Suppression Storage are nested (consolidated)



City of Camas Water Utility Functional Allocations

Allocation of Operating Expenses

Test Year =>	2004	FUNCTIONS OF WATER SERVICE					AS ALL OTHERS	TOTAL	ALLOCATION BASIS
OPERATING EXPENSE	TOTAL COSTS	CUSTOMER BILLS	METERS & SERVICES	BASE	PEAK	FIRE PROTECTION			
TAXES	121,455	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Other
SOURCE OF SUPPLY	294,771	0.00%	0.00%	52.63%	47.37%	0.00%	0.00%	100.00%	As Source of Supply
PUMPING	298,304	0.00%	0.00%	47.37%	42.63%	10.00%	0.00%	100.00%	As Pumping
TREATMENT	345,541	0.00%	0.00%	52.63%	47.37%	0.00%	0.00%	100.00%	As Treatment
TRANSMISSION/DISTRIBUTION	337,302	0.00%	0.00%	47.37%	42.63%	10.00%	0.00%	100.00%	As Transmission/Distribution
SERVICES	113,115	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	As Services
METERS	178,820	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	As Meters
ADMINISTRATION/GENERAL									
Customer Billing	56,134	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	All To Customer Billing
All Other	350,556	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Other
CUSTOMER SERVICE	47,901	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Other
Total Operating Expenses	\$ 2,143,899	\$ 58,134	\$ 291,935	\$ 638,083	\$ 574,274	\$ 63,561	\$ 519,912	\$ 2,143,899	
Water Service Functions		3.46%	17.98%	39.29%	35.36%	3.91%		100.00%	
Allocation of "As All Others"		\$ 17,971	\$ 93,462	\$ 204,279	\$ 183,851	\$ 20,349	\$ (519,912)	\$ -	
TOTAL	\$ 2,143,899	\$ 74,105	\$ 385,396	\$ 842,362	\$ 758,126	\$ 83,909	\$ -	\$ 2,143,899	
Allocation Percentages	100.00%	3.46%	17.98%	39.29%	35.36%	3.91%	0.00%	100.00%	



City of Camas Water Utility Functional Allocations

Allocation of Revenue Requirement

REVENUE REQUIREMENT	2004 TOTAL COSTS	FUNCTIONS OF WATER SERVICE					AS ALL OTHERS	TOTAL	ALLOCATION BASIS
		CUSTOMER BILLS	METER SERVICES	BASE	PEAK	FIRE PROTECTION			
OPERATING AND CAPITAL EXPENSES									
Cash Operating Expenses	\$ 2,143,899	3.46%	17.98%	39.29%	35.36%	3.91%	0.00%	100.00%	As O&M Expense
Existing Debt Service	131,794	0.00%	17.20%	37.73%	32.61%	12.47%	0.00%	100.00%	As plant-in-service
New Debt Service	202,444	0.00%	17.20%	37.73%	32.61%	12.47%	0.00%	100.00%	As plant-in-service
Interfund Loan Repayment (to Other Funds)	-	0.00%	17.20%	37.73%	32.61%	12.47%	0.00%	100.00%	As plant-in-service
Rate Funded Capital Improvement Program	-	0.00%	17.20%	37.73%	32.61%	12.47%	0.00%	100.00%	As plant-in-service
Depreciation Funding	-	0.00%	17.20%	37.73%	32.61%	12.47%	0.00%	100.00%	As plant-in-service
Total Expenses	2,478,137	2.99%	17.87%	39.08%	34.99%	5.07%	0.00%	100.00%	
OTHER REVENUES AND ADJUSTMENTS									
Less: Fire Protection Revenues	\$ (28,300)	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	Direct Allocation
Less: Other Revenues	(94,767)	3.46%	17.98%	39.29%	35.36%	3.91%	0.00%	100.00%	As O&M Expense
Less: Operating Fund Interest Earnings	(21,235)	3.46%	17.98%	39.29%	35.36%	3.91%	0.00%	100.00%	As O&M Expense
Plus: Additional State Excise Tax	3,882	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
Plus: Net Cash Flow after Rate Increase	(0)	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
Plus: Adjustment for Partial Year Increase	-	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
Rate Revenue Requirement	\$ 2,337,717	\$ 70,095	\$ 422,037	\$ 922,877	\$ 826,089	\$ 92,736	\$ 3,882	\$ 2,337,717	
Water Service Functions		3.00%	18.08%	39.54%	35.40%	3.97%		100.00%	
Allocation of "As All Others"		\$ 117	\$ 702	\$ 1,535	\$ 1,374	\$ 154	\$ (3,882)	\$ -	
Rate Revenue Requirement	\$ 2,337,717	\$ 70,212	\$ 422,739	\$ 924,412	\$ 827,463	\$ 92,890	\$ -	\$ 2,337,717	
Allocation Percentages	100.00%	3.00%	18.08%	39.54%	35.40%	3.97%	0.00%	100.00%	



City of Camas Water Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas[Water 10-28 II - no irr incr.xls]CustAlloc

2004 Rates

Allocation of Customer Costs to Customer Classes

Customer Classes	Allocation Basis		Allocated Cost
	No. of Meters	% Share	
Residential	6,134	93.50%	\$ 65,651
Commercial	254	3.88%	2,721
Industrial	32	0.48%	340
Cemetery	1	0.02%	11
Irrigation	139	2.12%	1,489
TOTAL	6,560	100.00%	\$ 70,212



City of Camas Water Utility Customer Class Allocations

Date: 12/12/03
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Allocation of Meters and Services Costs to Customer Classes

METERS & SERVICES COSTS		\$	422,739	<i>using inside + outside weighted statistics</i>
Customer Classes	Allocation Basis		Allocated Cost	
	No. of MSEs	% Share		
Residential	6,277	85.65%	\$	362,065
Commercial	518	7.07%		29,867
Industrial	205	2.80%		11,841
Cemetery	14	0.19%		808
Irrigation	315	4.30%		18,158
TOTAL	7,329	100.00%	\$	422,739



City of Camas Water Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas[Water 10-28 II - no irr incr.xls]CustAlloc

Allocation of Base Demand Costs to Customer Classes

BASE DEMAND COSTS		\$ 924,412		<i>using inside + outside weighted statistics</i>	
Customer Classes	Allocation Basis		Allocated Cost		
	Total Usage [a]	% Share			
Residential	646,269	48.91%	\$ 452,121		
Commercial	102,310	7.74%	71,575		
Industrial	514,968	38.97%	360,264		
Cemetery	2,356	0.18%	1,648		
Irrigation	55,467	4.20%	38,804		
TOTAL	1,321,371	100.00%	\$ 924,412		

[a] Total Annualized Winter Water Consumption



City of Camas Water Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\[Water 10-28 II - no irr incr.xls]CustAlloc

Allocation of Peak Demand Costs to Customer Classes

PEAK DEMAND COSTS		\$ 827,463		<i>using inside + outside weighted statistics</i>	
Customer Classes	Allocation Basis		Allocated Cost		
	Peak Usage [a]	% Share			
Residential	129,193	58.24%	\$	481,923	
Commercial	15,412	6.95%		57,493	
Industrial	48,800	22.00%		182,037	
Cemetery	422	0.19%		1,572	
Irrigation	27,998	12.62%		104,439	
TOTAL	221,825	100.00%	\$	827,463	

[a] Maximum Bi-Monthly Volume/2



City of Camas Water Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\Water 10-28 II - no irr incr.xls\CustAlloc

Allocation of Fire Protection Costs to Customer Classes

FIRE PROTECTION COSTS		\$ 92,890 <i>using inside + outside weighted statistics</i>			
Customer Classes	Fire Flow Requirement [a]			Billed MCEs	Total Usage
	Distribution	Storage			
	Flow (gpm)	Duration (hour)	gallons		
Residential	1,000	1:00	1,000	80,221	856,783
Commercial	1,500	2:00	3,000	10,754	99,797
Industrial	5,000	4:00	20,000	4,842	564,335
Cemetery	N/A	N/A	N/A	300	3,522
Irrigation	N/A	N/A	N/A	6,712	118,177
TOTAL or AVERAGE			24,000	102,828	1,642,614

[a] Fire flow requirements are taken from 2001 Water System Comprehensive Plan; Duration is per engineer estimate.

	Allocated Cost	Billed MCEs	Total Usage	Monthly Cost Per MCE	Cost Per ccf
Distribution	66.92%				
All Customers	\$ 12,433	95,816	1,520,915	\$ 0.13	\$ 0.01
Commercial/City Increment	\$ 6,217	15,595	664,132	\$ 0.40	\$ 0.01
Industrial Increment	\$ 43,516	4,842	564,335	\$ 8.99	\$ 0.08
Storage [a]	33.08%				
All Customers	\$ 1,536	95,816	1,520,915	\$ 0.02	\$ 0.00
Commercial/City Increment	\$ 3,073	15,595	664,132	\$ 0.20	\$ 0.00
Industrial Increment	\$ 26,116	4,842	564,335	\$ 5.39	\$ 0.05
Total	\$ 92,890				

[a] Fire Protection share of total storage requirements

Check: Total Costs Allocated: \$ 2,337,717
Total Revenue Requirement: \$ 2,337,717



City of Camas Water Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\Water 10-28 II - no irr incr.xls\CustAlloc

FIRE PROTECTION ALLOCATION
1 = PER MCE
2 = PER CCF

Toggle: 2

Summary of Allocations

Customer Classes	Customer Accounts	Meters & Services	Base Demand	Peak Capacity	Fire Protection	Total Revenue Req.	% Share
Residential	\$ 65,651	\$ 362,065	\$ 452,121	\$ 481,923	\$ 7,869	\$ 1,369,629	58.59%
Commercial	2,721	29,867	71,575	57,493	2,312	163,968	7.01%
Industrial	340	11,841	360,264	182,037	82,709	637,191	27.26%
Cemetery	11	808	1,648	1,572		4,039	0.17%
Irrigation	1,489	18,158	38,804	104,439		162,890	6.97%
TOTAL	\$ 70,212	\$ 422,739	\$ 924,412	\$ 827,463	\$ 92,890	\$ 2,337,717	100.00%



City of Camas Water Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas[Water 10-28 II - no irr incr.xls]CustAlloc

Cost of Service Comparison

Customer Classes	2004 Revenue with Across-the-Board Increase	2004 Cost of Service	Indicated Increase/ (Decrease)
Residential	\$ 1,420,974	\$ 1,369,629	-3.61%
Commercial	185,700	163,968	-11.70%
Industrial	632,312	637,191	0.77%
Cemetery	2,096	4,039	92.70%
Irrigation	96,635	162,890	68.56%
TOTAL	\$ 2,337,717	\$ 2,337,717	0.00%



City of Camas Water Utility Unit Costs

Date: 12/12/2003
 Filename: F:\Camas\Water 10-28 II - no irr incr.xls\Unit Costs

Customer Costs

	Residential	Commercial	Industrial	Cemetery	Irrigation
Percent to be Recovered:	100.00%	100.00%	100.00%	100.00%	100.00%
Allocated Revenue Requirements:	\$ 65,651	\$ 2,721	\$ 340	\$ 11	\$ 1,489
Charge Basis: # of Billed Accounts	73,602	3,051	382	12	1,669
Monthly Cost per Account:	\$ 0.89				

Meters & Services Cost

	Residential	Commercial	Industrial	Cemetery	Irrigation
Percent to be Recovered:	100.00%	100.00%	100.00%	100.00%	100.00%
Allocated Revenue Requirements:	\$ 362,065	\$ 29,867	\$ 11,841	\$ 808	\$ 18,158
Charge Basis: Billed MSEs	75,322	6,213	2,463	168	3,778
Monthly Cost per MSE:	\$ 4.81				

Base Demand Costs

	Residential	Commercial	Industrial	Cemetery	Irrigation
Percent to be Recovered:					
<i>Per MCE</i>	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Per ccf</i>	100.00%	100.00%	100.00%	100.00%	100.00%
Allocated Revenue Requirements:					
<i>Per MCE</i>	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Per ccf</i>	\$ 452,121	\$ 71,575	\$ 360,264	\$ 1,648	\$ 38,804
Charge Basis:					
<i>Billed MCEs</i>	80,221	10,754	4,842	300	6,712
<i>Total Consumption</i>	856,783	99,797	564,335	3,522	118,177
Monthly Cost per MCE	\$ -				
Cost per ccf	\$ 0.53	\$ 0.72	\$ 0.64	\$ 0.47	\$ 0.33

Peak Demand Costs

	Residential	Commercial	Industrial	Cemetery	Irrigation
Percent to be Recovered:					
<i>Per MCE</i>	0.00%	0.00%	0.00%	0.00%	0.00%
<i>Per ccf</i>	100.00%	100.00%	100.00%	100.00%	100.00%
Allocated Revenue Requirements:					
<i>Per MCE</i>	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Per ccf</i>	\$ 481,923	\$ 57,493	\$ 182,037	\$ 1,572	\$ 104,439
Charge Basis:					
<i>Billed MCEs</i>	80,221	10,754	4,842	300	6,712
<i>Total Consumption</i>	856,783	99,797	564,335	3,522	118,177
Monthly Cost per MCE	\$ -				
Cost per ccf	\$ 0.56	\$ 0.58	\$ 0.32	\$ 0.45	\$ 0.88

Fire Protection Costs

	Residential	Commercial	Industrial	Cemetery	Irrigation
Monthly Cost per MCE	\$ 0.15	\$ 0.74	\$ 15.12	N/A	N/A
Cost per ccf	\$ 0.01	\$ 0.02	\$ 0.15	N/A	N/A



City of Camas Water Utility Unit Costs

Date: 12/12/2003
 Filename: F:\Camas\Water 10-28 II - no irr incr.xls\Unit Costs

Unit Cost Summary

Residential				
Cost Component	Per Account	Per MSE	Per MCE	Per ccf
Customer	\$ 0.89			
Meters & Services		\$ 4.81		
Base Demand			\$ -	\$ 0.53
Peak Demand			\$ -	\$ 0.56
Fire Protection 2			\$ -	\$ 0.01

Commercial				
Cost Component	Per Account	Per MSE	Per MCE	Per ccf
Customer	\$ 0.89			
Meters & Services		\$ 4.81		
Base Demand			\$ -	\$ 0.72
Peak Demand			\$ -	\$ 0.58
Fire Protection 2			\$ -	\$ 0.02

Industrial				
Cost Component	Per Account	Per MSE	Per MCE	Per ccf
Customer	\$ 0.89			
Meters & Services		\$ 4.81		
Base Demand			\$ -	\$ 0.64
Peak Demand			\$ -	\$ 0.32
Fire Protection 2			\$ -	\$ 0.15

Cemetery				
Cost Component	Per Account	Per MSE	Per MCE	Per ccf
Customer	\$ 0.89			
Meters & Services		\$ 4.81		
Base Demand			\$ -	\$ 0.47
Peak Demand			\$ -	\$ 0.45
Fire Protection 2			N/A	N/A

Irrigation				
Cost Component	Per Account	Per MSE	Per MCE	Per ccf
Customer	\$ 0.89			
Meters & Services		\$ 4.81		
Base Demand			\$ -	\$ 0.33
Peak Demand			\$ -	\$ 0.88
Fire Protection 2			N/A	N/A



City of Camas Water Utility Rate Design

Rate Design - Option A - Cost of Service Rates

Date: 12/12/2003
 Filename: F:\Camas\Water 10-28 II - no Irr Incr.xls\RateDesign

Outside City Weighting Factor: 1.5

Residential

Inside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 0.89	\$ 4.81	\$ -	\$ 5.70	\$ 1.10	4,953	651,571	\$ 338,723	\$ 716,311	\$ 1,055,034
3/4" Meter	0.89	5.29	-	6.18	1.10	97	18,763	7,178	20,628	27,805
1" Meter	0.89	6.73	-	7.62	1.10	191	47,656	17,502	52,391	69,893
1 1/4" Meter	0.89	7.69	-	8.58	1.10	-	-	-	-	-
1 1/2" Meter	0.89	8.65	-	9.54	1.10	28	13,343	3,186	14,669	17,854
2" Meter	0.89	13.94	-	14.83	1.10	9	9,758	1,584	10,728	12,312
3" Meter	0.89	52.88	-	53.77	1.10	1	2,630	718	2,891	3,609
4" Meter	0.89	67.30	-	68.19	1.10	-	-	-	-	-
6" Meter	0.89	100.94	-	101.84	1.10	-	-	-	-	-
8" Meter	0.89	139.40	-	140.29	1.10	-	-	-	-	-
10" Meter	0.89	182.66	-	183.55	1.10	-	-	-	-	-
						5,279	743,721	\$ 368,890	\$ 817,617	\$ 1,186,507

Outside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 1.34	\$ 7.21	\$ -	\$ 8.55	\$ 1.65	557	73,346	\$ 57,177	\$ 120,951	\$ 178,128
3/4" Meter	1.34	7.93	-	9.27	1.65	1	56	124	92	215
1" Meter	1.34	10.09	-	11.43	1.65	11	1,973	1,526	3,253	4,779
1 1/4" Meter	1.34	11.54	-	12.87	1.65	-	-	-	-	-
1 1/2" Meter	1.34	12.98	-	14.32	1.65	-	-	-	-	-
2" Meter	1.34	20.91	-	22.25	1.65	-	-	-	-	-
3" Meter	1.34	79.31	-	80.65	1.65	-	-	-	-	-
4" Meter	1.34	100.94	-	102.28	1.65	-	-	-	-	-
6" Meter	1.34	151.42	-	152.75	1.65	-	-	-	-	-
8" Meter	1.34	209.10	-	210.44	1.65	-	-	-	-	-
10" Meter	1.34	273.99	-	275.33	1.65	-	-	-	-	-
						570	75,374	\$ 58,827	\$ 124,295	\$ 183,122

Total Inside + Outside City Revenues: \$ 1,369,629
 Required Residential Revenues: \$ 1,369,629
 Surplus (Deficit): \$ -



City of Camas Water Utility Rate Design

Rate Design - Option A - Cost of Service Rates

Date: 12/12/2003
 Filename: F:\Camas\Water 10-28 II - no irr incr.xls\RateDesign

Commercial

Inside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 0.89	\$ 4.81	\$ -	\$ 5.70	\$ 1.32	117	27,300	\$ 7,989	\$ 35,939	\$ 43,928
3/4" Meter	0.89	5.29	-	6.18	1.32	2	891	165	1,173	1,338
1" Meter	0.89	6.73	-	7.62	1.32	62	16,530	5,698	21,762	27,460
1 1/4" Meter	0.89	7.69	-	8.58	1.32	1	1	115	1	116
1 1/2" Meter	0.89	8.65	-	9.54	1.32	14	5,581	1,657	7,347	9,003
2" Meter	0.89	13.94	-	14.83	1.32	27	23,421	4,752	30,834	35,586
3" Meter	0.89	52.88	-	53.77	1.32	6	3,542	3,589	4,663	8,253
4" Meter	0.89	67.30	-	68.19	1.32	3	9,337	2,731	12,291	15,022
6" Meter	0.89	100.94	-	101.84	1.32	-	-	-	-	-
8" Meter	0.89	139.40	-	140.29	1.32	-	-	-	-	-
10" Meter	0.89	182.66	-	183.55	1.32	-	-	-	-	-
						233	86,603	\$ 26,696	\$ 114,011	\$ 140,706

Outside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 1.34	\$ 7.21	\$ -	\$ 8.55	\$ 1.97	4	3,413	\$ 457	\$ 6,740	\$ 7,197
3/4" Meter	1.34	7.93	-	9.27	1.97	-	-	-	-	-
1" Meter	1.34	10.09	-	11.43	1.97	3	494	458	975	1,433
1 1/4" Meter	1.34	11.54	-	12.87	1.97	-	-	-	-	-
1 1/2" Meter	1.34	12.98	-	14.32	1.97	2	247	382	488	870
2" Meter	1.34	20.91	-	22.25	1.97	-	-	-	-	-
3" Meter	1.34	79.31	-	80.65	1.97	3	2,646	3,230	5,224	8,455
4" Meter	1.34	100.94	-	102.28	1.97	1	1,996	1,366	3,941	5,307
6" Meter	1.34	151.42	-	152.75	1.97	-	-	-	-	-
8" Meter	1.34	209.10	-	210.44	1.97	-	-	-	-	-
10" Meter	1.34	273.99	-	275.33	1.97	-	-	-	-	-
						14	8,796	\$ 5,892	\$ 17,369	\$ 23,262

Total Inside + Outside City Revenues: \$ 163,968
 Required Commercial Revenues: \$ 163,968
 Surplus (Deficit): \$ -



City of Camas Water Utility Rate Design

Rate Design - Option A - Cost of Service Rates

Date: 12/12/2003
 Filename: F:\Camas\Water 10-28 II - no irr incr.xls\RateDesign

Industrial

Inside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 0.89	\$ 4.81	\$ -	\$ 5.70	\$ 1.11	3	347	\$ 218	\$ 384	\$ 602
3/4" Meter	0.89	5.29	-	6.18	1.11	-	-	-	-	-
1" Meter	0.89	6.73	-	7.62	1.11	1	93	97	103	200
1 1/4" Meter	0.89	7.69	-	8.58	1.11	-	-	-	-	-
1 1/2" Meter	0.89	8.65	-	9.54	1.11	3	4,203	364	4,655	5,019
2" Meter	0.89	13.94	-	14.83	1.11	13	100,338	2,265	111,126	113,391
3" Meter	0.89	52.88	-	53.77	1.11	4	8,495	2,737	9,409	12,145
4" Meter	0.89	67.30	-	68.19	1.11	3	148,194	2,603	164,127	166,730
6" Meter	0.89	100.94	-	101.84	1.11	1	241,530	1,296	267,498	268,793
8" Meter	0.89	139.40	-	140.29	1.11	-	-	-	-	-
10" Meter	0.89	182.66	-	183.55	1.11	-	-	-	-	-
						29	503,200	\$ 9,579	\$ 557,302	\$ 566,881

Outside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 1.34	\$ 7.21	\$ -	\$ 8.55	\$ 1.66	-	-	\$ -	\$ -	\$ -
3/4" Meter	1.34	7.93	-	9.27	1.66	-	-	-	-	-
1" Meter	1.34	10.09	-	11.43	1.66	-	-	-	-	-
1 1/4" Meter	1.34	11.54	-	12.87	1.66	-	-	-	-	-
1 1/2" Meter	1.34	12.98	-	14.32	1.66	-	-	-	-	-
2" Meter	1.34	20.91	-	22.25	1.66	-	-	-	-	-
3" Meter	1.34	79.31	-	80.65	1.66	-	-	-	-	-
4" Meter	1.34	100.94	-	102.28	1.66	2	40,756	2,603	67,708	70,310
6" Meter	1.34	151.42	-	152.75	1.66	-	-	-	-	-
8" Meter	1.34	209.10	-	210.44	1.66	-	-	-	-	-
10" Meter	1.34	273.99	-	275.33	1.66	-	-	-	-	-
						2	40,756	\$ 2,603	\$ 67,708	\$ 70,310

Total Inside + Outside City Revenues: \$ 637,191
 Required Industrial Revenues: \$ 637,191
 Surplus (Deficit): \$ -



City of Camas Water Utility Rate Design

Rate Design - Option A - Cost of Service Rates

Date: 12/12/2003
 Filename: F:\Camas\Water 10-28 II - no irr incr.xls\RateDesign

Cemetery

Inside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 0.89	\$ 4.81	\$ -	\$ 5.70	\$ 0.91	-	-	\$ -	\$ -	\$ -
3/4" Meter	0.89	5.29	-	6.18	0.91	-	-	-	-	-
1" Meter	0.89	6.73	-	7.62	0.91	-	-	-	-	-
1 1/4" Meter	0.89	7.69	-	8.58	0.91	-	-	-	-	-
1 1/2" Meter	0.89	8.65	-	9.54	0.91	-	-	-	-	-
2" Meter	0.89	13.94	-	14.83	0.91	-	-	-	-	-
3" Meter	0.89	52.88	-	53.77	0.91	-	-	-	-	-
4" Meter	0.89	67.30	-	68.19	0.91	1	3,522	818	3,221	4,039
6" Meter	0.89	100.94	-	101.84	0.91	-	-	-	-	-
8" Meter	0.89	139.40	-	140.29	0.91	-	-	-	-	-
10" Meter	0.89	182.66	-	183.55	0.91	-	-	-	-	-
						1	3,522	\$ 818	\$ 3,221	\$ 4,039

Outside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 1.34	\$ 7.21	\$ -	\$ 8.55	\$ 1.37	-	-	\$ -	\$ -	\$ -
3/4" Meter	1.34	7.93	-	9.27	1.37	-	-	-	-	-
1" Meter	1.34	10.09	-	11.43	1.37	-	-	-	-	-
1 1/4" Meter	1.34	11.54	-	12.87	1.37	-	-	-	-	-
1 1/2" Meter	1.34	12.98	-	14.32	1.37	-	-	-	-	-
2" Meter	1.34	20.91	-	22.25	1.37	-	-	-	-	-
3" Meter	1.34	79.31	-	80.65	1.37	-	-	-	-	-
4" Meter	1.34	100.94	-	102.28	1.37	-	-	-	-	-
6" Meter	1.34	151.42	-	152.75	1.37	-	-	-	-	-
8" Meter	1.34	209.10	-	210.44	1.37	-	-	-	-	-
10" Meter	1.34	273.99	-	275.33	1.37	-	-	-	-	-
						-	-	\$ -	\$ -	\$ -

Total Inside + Outside City Revenues: \$ 4,039
 Required Cemetery Revenues: \$ 4,039
 Surplus (Deficit): \$ -



City of Camas Water Utility Rate Design

Rate Design - Option A - Cost of Service Rates

Date: 12/12/2003
 Filename: F:\Camas\Water 10-28 II - no irr incr.xls\RateDesign

Irrigation

Inside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 0.89	\$ 4.81	\$ -	\$ 5.70	\$ 1.21	57	10,982	\$ 3,880	\$ 13,311	\$ 17,192
3/4" Meter	0.89	5.29	-	6.18	1.21	1	345	83	418	501
1" Meter	0.89	6.73	-	7.62	1.21	29	15,546	2,646	18,843	21,489
1 1/4" Meter	0.89	7.69	-	8.58	1.21	-	-	-	-	-
1 1/2" Meter	0.89	8.65	-	9.54	1.21	11	14,601	1,274	17,698	18,972
2" Meter	0.89	13.94	-	14.83	1.21	12	44,015	2,178	53,351	55,529
3" Meter	0.89	52.88	-	53.77	1.21	7	12,076	4,307	14,637	18,944
4" Meter	0.89	67.30	-	68.19	1.21	2	9,922	1,821	12,026	13,847
6" Meter	0.89	100.94	-	101.84	1.21	-	-	-	-	-
8" Meter	0.89	139.40	-	140.29	1.21	-	-	-	-	-
10" Meter	0.89	182.66	-	183.55	1.21	-	-	-	-	-
						119	107,486	\$ 16,188	\$ 130,285	\$ 146,473

Outside City

Rate Schedule						Customer Statistics		Calculated Revenues		
Meter Size	Per Bill	Per MSE	Per MCE	Total Base Charge (Per month)	Volume Charge (per ccf)	# of Accounts	Total Usage (ccf)	Base	Volume	Total
5/8" Meter	\$ 1.34	\$ 7.21	\$ -	\$ 8.55	\$ 1.82	7	896	\$ 685	\$ 1,628	\$ 2,313
3/4" Meter	1.34	7.93	-	9.27	1.82	1	1,696	124	3,083	3,207
1" Meter	1.34	10.09	-	11.43	1.82	4	1,575	611	2,864	3,475
1 1/4" Meter	1.34	11.54	-	12.87	1.82	-	-	-	-	-
1 1/2" Meter	1.34	12.98	-	14.32	1.82	-	-	-	-	-
2" Meter	1.34	20.91	-	22.25	1.82	-	-	-	-	-
3" Meter	1.34	79.31	-	80.65	1.82	-	-	-	-	-
4" Meter	1.34	100.94	-	102.28	1.82	-	-	-	-	-
6" Meter	1.34	151.42	-	152.75	1.82	1	2,961	2,039	5,383	7,422
8" Meter	1.34	209.10	-	210.44	1.82	-	-	-	-	-
10" Meter	1.34	273.99	-	275.33	1.82	-	-	-	-	-
						13	7,127	\$ 3,458	\$ 12,958	\$ 16,416

Total Inside + Outside City Revenues: \$ 162,890
 Required Irrigation Revenues: \$ 162,890
 Surplus (Deficit): \$ -

Calculated Total Revenues	\$ 2,337,717
Required Total Revenues	\$ 2,337,717
Surplus (Deficit):	\$ -



City of Camas Water Utility Rate Schedule: 2004-2008

Rates

MONTHLY SERVICE CHARGE							
	Meter Size	Year					
		2003	2004	2005	2006	2007	2008
INSIDE CITY	5/8"	\$ 4.01	\$ 5.70	\$ 5.70	\$ 6.07	\$ 6.43	\$ 6.43
	3/4"	4.02	6.18	6.18	6.58	6.97	6.97
	1.0"	4.04	7.62	7.62	8.12	8.60	8.60
	1.25"	4.08	8.58	8.58	9.15	9.68	9.68
	1.5"	4.10	9.54	9.54	10.17	10.77	10.77
	2.0"	4.16	14.83	14.83	15.80	16.73	16.73
	3.0"	4.32	53.77	53.77	57.29	60.65	60.65
	4.0"	4.53	68.19	68.19	72.65	76.92	76.92
	6.0"	5.08	101.84	101.84	108.50	114.88	114.88
	8.0"	5.74	140.29	140.29	149.48	158.26	158.26
10.0"	6.50	183.55	183.55	195.57	207.06	207.06	
OUTSIDE CITY	5/8"	\$ 6.03	\$ 8.55	\$ 8.55	\$ 9.11	\$ 9.64	\$ 9.64
	3/4"	6.05	9.27	9.27	9.88	10.46	10.46
	1.0"	6.08	11.43	11.43	12.18	12.90	12.90
	1.25"	6.12	12.87	12.87	13.72	14.52	14.52
	1.5"	6.15	14.32	14.32	15.25	16.15	16.15
	2.0"	6.25	22.25	22.25	23.70	25.10	25.10
	3.0"	6.48	80.65	80.65	85.93	90.98	90.98
	4.0"	6.81	102.28	102.28	108.98	115.38	115.38
	6.0"	7.63	152.75	152.75	162.76	172.32	172.32
	8.0"	8.61	210.44	210.44	224.22	237.38	237.38
10.0"	9.76	275.33	275.33	293.36	310.59	310.59	

VOLUME CHARGE (\$/ccf)							
	Customer Class	Year					
		2003	2004	2005	2006	2007	2008
INSIDE CITY	Residential	\$ 1.26	\$ 1.16	\$ 1.20	\$ 1.22	\$ 1.24	\$ 1.24
	Commercial	1.68	1.35	1.40	1.45	1.50	1.50
	Industrial	1.08	1.12	1.16	1.20	1.25	1.25
	Cemetery	0.56	0.56	0.56	0.56	0.56	0.56
	Irrigation	0.76	0.76	0.95	1.10	1.25	1.40
OUTSIDE CITY	Residential	\$ 1.88	\$ 1.74	\$ 1.80	\$ 1.83	\$ 1.86	\$ 1.86
	Commercial	2.51	2.03	2.10	2.18	2.25	2.25
	Industrial	1.63	1.68	1.74	1.80	1.88	1.88
	Cemetery	n/a	0.84	0.84	0.84	0.84	0.84
	Irrigation	1.14	1.14	1.43	1.65	1.88	2.10

Revenue Requirements	\$ 2,162,288	\$ 2,337,717	\$ 2,439,299	\$ 2,707,263	\$ 2,980,847	\$ 3,102,913
Calculated Revenues		2,345,388	2,534,971	2,743,322	2,964,432	3,106,924
Difference		\$ 7,671	\$ 95,672	\$ 36,058	\$ (16,415)	\$ 4,011

Revenue Requirement Increases		2004	2005	2006	2007	2008
Calculated	Annual	3.42%	0.00%	6.55%	5.87%	0.00%
	Cumulative	3.42%	3.42%	10.19%	16.66%	16.66%
Phase-In Cost of Service	Annual	3.75%	3.58%	3.89%	3.91%	0.68%
	Cumulative	3.75%	7.47%	11.65%	16.02%	16.81%



City of Camas Water Utility Summary of Statistics by Customer Class

*** Exclusion of codes 60, C57, C58, All Fire

OUTSIDE CITY MULTIPLIER: 1.00

Customer Class	Meter Size	INSIDE CITY						OUTSIDE CITY				TOTAL			
		# of Bills	# of Meters	MS Ratio	Billed MSEs	MC Ratio	Billed MCEs	# of Bills	# of Meters	Billed MSEs	Billed MCEs	# of Bills	# of Meters	Billed MSEs	Billed MCEs
Residential	5/8"	26,714	4,452	1.0	26,714	1.0	26,714	3,002	501	3,002	3,002	29,716	4,953	29,716	29,716
	3/4"	520	87	1.1	572	1.5	780	6	1	7	9	526	88	579	789
	1"	1,035	172	1.4	1,449	2.5	2,588	60	10	84	150	1,095	182	1,533	2,738
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	150	25	1.8	270	5.0	750	-	-	-	-	150	25	270	750
	2"	48	8	2.9	139	8.0	384	-	-	-	-	48	8	139	384
	3"	5	1	11.0	55	16.0	80	-	-	-	-	5	1	55	80
	4"	-	-	14.0	-	25.0	-	-	-	-	-	-	-	-	-
	6"	-	-	21.0	-	50.0	-	-	-	-	-	-	-	-	-
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	28,472	4,745		29,199		31,296	3,068	512	3,093	3,167	31,540	5,257	32,292	34,457	
Commercial	5/8"	570	95	1.0	570	1.0	570	-	-	-	-	570	95	570	570
	3/4"	12	2	1.1	13	1.5	18	-	-	-	-	12	2	13	18
	1"	302	51	1.4	423	2.5	755	18	3	25	45	320	54	448	800
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	61	11	1.8	110	5.0	305	12	2	22	60	73	13	131	365
	2"	82	14	2.9	238	8.0	656	-	-	-	-	82	14	238	656
	3"	28	5	11.0	308	16.0	448	26	3	286	416	54	8	594	864
	4"	24	3	14.0	336	25.0	600	6	1	84	150	30	4	420	750
	6"	-	-	21.0	-	50.0	-	-	-	-	-	-	-	-	-
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	1,079	181		1,998		3,352	62	9	417	671	1,141	190	2,414	4,023	
Industrial	5/8"	18	3	1.0	18	1.0	18	-	-	-	-	18	3	18	18
	3/4"	-	-	1.1	-	1.5	-	-	-	-	-	-	-	-	-
	1"	12	1	1.4	17	2.5	30	-	-	-	-	12	1	17	30
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	30	3	1.8	54	5.0	150	-	-	-	-	30	3	54	150
	2"	144	12	2.9	418	8.0	1,152	-	-	-	-	144	12	418	1,152
	3"	48	4	11.0	528	16.0	768	-	-	-	-	48	4	528	768
	4"	36	3	14.0	504	25.0	900	14	2	196	350	50	5	700	1,250
	6"	12	1	21.0	252	50.0	600	-	-	-	-	12	1	252	600
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	300	27		1,790		3,618	14	2	196	350	314	29	1,986	3,968	
City	5/8"	60	10	1.0	60	1.0	60	19	4	19	19	79	14	79	79
	3/4"	-	-	1.1	-	1.5	-	-	-	-	-	-	-	-	-
	1"	30	5	1.4	42	2.5	75	-	-	-	-	30	5	42	75
	1 1/4"	6	1	1.6	10	3.8	23	-	-	-	-	6	1	10	23
	1 1/2"	7	2	1.8	13	5.0	35	-	-	-	-	7	2	13	35
	2"	63	10	2.9	183	8.0	504	-	-	-	-	63	10	183	504
	3"	-	-	11.0	-	16.0	-	-	-	-	-	-	-	-	-
	4"	-	-	14.0	-	25.0	-	-	-	-	-	-	-	-	-
	6"	-	-	21.0	-	50.0	-	-	-	-	-	-	-	-	-
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	166	28		307		697	19	4	19	19	185	32	326	716	
Cemetery	5/8"	-	-	1.0	-	1.0	-	-	-	-	-	-	-	-	-
	3/4"	-	-	1.1	-	1.5	-	-	-	-	-	-	-	-	-
	1"	-	-	1.4	-	2.5	-	-	-	-	-	-	-	-	-
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	-	-	1.8	-	5.0	-	-	-	-	-	-	-	-	-
	2"	-	-	2.9	-	8.0	-	-	-	-	-	-	-	-	-
	3"	-	-	11.0	-	16.0	-	-	-	-	-	-	-	-	-
	4"	6	1	14.0	84	25.0	150	-	-	-	-	6	1	84	150
	6"	-	-	21.0	-	50.0	-	-	-	-	-	-	-	-	-
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	6	7		84		150	-	-	-	-	6	7	84	150	
Irrigation	5/8"	304	51	1.0	304	1.0	304	32	6	32	32	336	57	336	336
	3/4"	2	1	1.1	2	1.5	3	6	1	7	9	8	2	9	12
	1"	148	26	1.4	207	2.5	370	19	4	27	48	167	30	234	418
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	76	10	1.8	137	5.0	380	-	-	-	-	76	10	137	380
	2"	96	11	2.9	278	8.0	768	-	-	-	-	96	11	278	768
	3"	43	6	11.0	473	16.0	688	-	-	-	-	43	6	473	688
	4"	10	2	14.0	140	25.0	250	-	-	-	-	10	2	140	250
	6"	-	-	21.0	-	50.0	-	2	1	42	100	2	1	42	100
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	679	107		1,542		2,763	59	12	107	189	738	119	1,649	2,952	
Totals:		30,702	5,089		34,920		41,875	3,222	539	3,832	4,390	33,924	5,628	38,751	46,265



**City of Camas
Water Utility
Summary of Billing Statistics by Customer Class - WEIGHTED**

Exclusion of codes 60, C57, C58, All Fire

OUTSIDE CITY MULTIPLIER: 1.50

Customer Class	Meter Size	INSIDE CITY						WEIGHTED OUTSIDE CITY				TOTAL			
		# of Bills	# of Meters	MS Ratio	Billed MSEs	MC Ratio	Billed MCEs	Weighted # of Bills	Weighted # of Meters	Weighted MSEs	Weighted MCEs	Weighted # of Bills	Weighted # of Meters	Billed MSEs	Billed MCEs
Residential	5/8"	26,714	4,452	1.0	26,714	1.0	26,714	4,503	752	4,503	4,503	31,217	5,204	31,217	31,217
	3/4"	520	87	1.1	572	1.5	780	9	2	10	14	529	89	582	794
	1"	1,035	172	1.4	1,449	2.5	2,588	90	15	126	225	1,125	187	1,575	2,813
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	150	25	1.8	270	5.0	750	-	-	-	-	150	25	270	750
	2"	48	8	2.9	139	8.0	384	-	-	-	-	48	8	139	384
	3"	5	1	11.0	55	16.0	80	-	-	-	-	5	1	55	80
	4"	-	-	14.0	-	25.0	-	-	-	-	-	-	-	-	-
	6"	-	-	21.0	-	50.0	-	-	-	-	-	-	-	-	-
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	28,472	4,745		29,199		31,296	4,602	768	4,639	4,742	33,074	5,513	33,838	36,037	
Commercial	5/8"	570	95	1.0	570	1.0	570	-	-	-	-	570	95	570	570
	3/4"	12	2	1.1	13	1.5	18	-	-	-	-	12	2	13	18
	1"	302	51	1.4	423	2.5	755	27	5	38	68	329	56	461	823
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	61	11	1.8	110	5.0	305	18	3	32	90	79	14	142	395
	2"	82	14	2.9	238	8.0	656	-	-	-	-	82	14	238	656
	3"	28	5	11.0	308	16.0	448	39	5	429	624	67	10	737	1,072
	4"	24	3	14.0	336	25.0	600	9	2	126	225	33	5	462	825
	6"	-	-	21.0	-	50.0	-	-	-	-	-	-	-	-	-
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	1,079	181		1,998		3,352	93	14	625	1,007	1,172	195	2,623	4,359	
Industrial	5/8"	18	3	1.0	18	1.0	18	-	-	-	-	18	3	18	18
	3/4"	-	-	1.1	-	1.5	-	-	-	-	-	-	-	-	-
	1"	12	1	1.4	17	2.5	30	-	-	-	-	12	1	17	30
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	30	3	1.8	54	5.0	150	-	-	-	-	30	3	54	150
	2"	144	12	2.9	418	8.0	1,152	-	-	-	-	144	12	418	1,152
	3"	48	4	11.0	528	16.0	768	-	-	-	-	48	4	528	768
	4"	36	3	14.0	504	25.0	900	21	3	294	525	57	6	798	1,425
	6"	12	1	21.0	252	50.0	600	-	-	-	-	12	1	252	600
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	300	27		1,790		3,618	21	3	294	525	321	30	2,084	4,143	
City	5/8"	60	10	1.0	60	1.0	60	29	6	29	29	89	16	89	89
	3/4"	-	-	1.1	-	1.5	-	-	-	-	-	-	-	-	-
	1"	30	5	1.4	42	2.5	75	-	-	-	-	30	5	42	75
	1 1/4"	6	1	1.6	10	3.8	23	-	-	-	-	6	1	10	23
	1 1/2"	7	2	1.8	13	5.0	35	-	-	-	-	7	2	13	35
	2"	63	10	2.9	183	8.0	504	-	-	-	-	63	10	183	504
	3"	-	-	11.0	-	16.0	-	-	-	-	-	-	-	-	-
	4"	-	-	14.0	-	25.0	-	-	-	-	-	-	-	-	-
	6"	-	-	21.0	-	50.0	-	-	-	-	-	-	-	-	-
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	166	28		307		697	29	6	29	29	195	34	335	725	
Cemetery	5/8"	-	-	1.0	-	1.0	-	-	-	-	-	-	-	-	-
	3/4"	-	-	1.1	-	1.5	-	-	-	-	-	-	-	-	-
	1"	-	-	1.4	-	2.5	-	-	-	-	-	-	-	-	-
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	-	-	1.8	-	5.0	-	-	-	-	-	-	-	-	-
	2"	-	-	2.9	-	8.0	-	-	-	-	-	-	-	-	-
	3"	-	-	11.0	-	16.0	-	-	-	-	-	-	-	-	-
	4"	6	1	14.0	84	25.0	150	-	-	-	-	6	1	84	150
	6"	-	-	21.0	-	50.0	-	-	-	-	-	-	-	-	-
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	6	1		84		150	-	-	-	-	6	1	84	150	
Irrigation	5/8"	304	51	1.0	304	1.0	304	48	9	48	48	352	60	352	352
	3/4"	2	1	1.1	2	1.5	3	9	2	10	14	11	3	12	17
	1"	148	26	1.4	207	2.5	370	29	6	40	71	177	32	247	441
	1 1/4"	-	-	1.6	-	3.8	-	-	-	-	-	-	-	-	-
	1 1/2"	76	10	1.8	137	5.0	380	-	-	-	-	76	10	137	380
	2"	96	11	2.9	278	8.0	768	-	-	-	-	96	11	278	768
	3"	43	6	11.0	473	16.0	688	-	-	-	-	43	6	473	688
	4"	10	2	14.0	140	25.0	250	-	-	-	-	10	2	140	250
	6"	-	-	21.0	-	50.0	-	3	2	63	150	3	2	63	150
	8"	-	-	29.0	-	80.0	-	-	-	-	-	-	-	-	-
10"	-	-	38.0	-	115.0	-	-	-	-	-	-	-	-	-	
Subtotal	679	107		1,542		2,763	89	18	161	283	768	125	1,702	3,046	
Totals:	30,702	5,089		34,920		41,875	4,833	809	5,747	6,584	35,535	5,898	40,667	48,459	



City of Camas Water Utility Summary of Consumption by Customer Class

*** Exclusion of codes 60, C57, C58, All Fire

Outside City Multiplier: 1.00

Customer Class	Meter Size	INSIDE CITY						OUTSIDE CITY						TOTAL	
		(1)	(2)	(3)	(2) + (3)	(2) x 2	(4)/12	(1)	(2)	(3)	(2) + (3)	(2) x 2	(4)/12	Annual Average	Peak Bi-Monthly
		Peak Bi-Month*	Winter Period**	Summer Period***	Total	Annualized Winter Average	Annual Average	Peak Bi-Month*	Winter Period**	Summer Period***	Total	Annualized Winter Average	Annual Average		
Residential	5/8"	176,605	220,728	364,925	585,653	441,456	48,804	20,482	24,314	41,612	65,926	48,628	5,494	54,298	197,087
	3/4"	5,967	5,525	11,340	16,865	11,050	1,405	17	16	34	50	32	4	1,410	5,984
	1"	12,109	17,199	25,636	42,835	34,398	3,570	700	508	1,265	1,773	1,016	148	3,717	12,809
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	2,683	5,264	6,729	11,993	10,528	999	-	-	-	-	-	-	999	2,683
	2"	2,502	3,602	5,169	8,771	7,204	731	-	-	-	-	-	-	731	2,502
	3"	581	869	1,495	2,364	1,738	197	-	-	-	-	-	-	197	581
	4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		200,447	253,187	415,294	668,481	506,374	55,707	21,199	24,838	42,911	67,749	49,676	5,646	61,353	221,646
Commercial	5/8"	2,540	16,116	6,424	22,540	32,232	1,878	-	-	-	-	-	-	1,878	2,540
	3/4"	148	378	423	801	756	67	-	-	-	-	-	-	67	148
	1"	4,218	5,567	9,154	14,721	11,134	1,227	195	94	350	444	188	37	1,264	4,413
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	831	2,857	2,146	4,803	5,314	400	64	65	157	222	130	19	419	895
	2"	2,348	5,814	6,852	12,666	11,628	1,056	-	-	-	-	-	-	1,056	2,348
	3"	368	1,735	1,449	3,184	3,470	265	476	925	1,453	2,378	1,850	198	464	844
	4"	1,535	3,849	4,543	8,392	7,698	699	6,306	686	1,108	1,794	1,372	150	849	7,841
	6"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		11,988	36,116	30,991	67,107	72,232	5,592	7,041	1,770	3,068	4,838	3,540	403	5,995	19,029
Industrial	5/8"	14	163	164	327	326	27	-	-	-	-	-	-	27	14
	3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1"	54	17	71	88	34	7	-	-	-	-	-	-	7	54
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	769	1,797	2,167	3,964	3,594	330	-	-	-	-	-	-	330	769
	2"	14,427	47,621	47,007	94,628	95,242	7,886	-	-	-	-	-	-	7,886	14,427
	3"	1,350	3,493	4,519	8,012	6,986	668	-	-	-	-	-	-	668	1,350
	4"	26,946	66,218	73,542	139,760	132,436	11,647	5,853	12,147	26,290	38,437	24,294	3,203	14,850	32,799
	6"	39,706	105,301	122,483	227,784	210,602	18,982	-	-	-	-	-	-	18,982	39,706
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		83,266	224,610	249,953	474,563	449,220	39,547	5,853	12,147	26,290	38,437	24,294	3,203	42,750	89,119
City	5/8"	970	706	1,292	1,998	1,412	167	684	2,348	720	3,068	4,696	256	422	1,654
	3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1"	19	15	122	137	30	11	-	-	-	-	-	-	11	19
	1 1/4"	-	1	-	1	2	0	-	-	-	-	-	-	0	-
	1 1/2"	98	60	153	213	120	18	-	-	-	-	-	-	18	98
	2"	3,044	2,905	5,481	8,386	5,810	699	-	-	-	-	-	-	699	3,044
	3"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		4,131	3,687	7,048	10,735	7,374	895	684	2,348	720	3,068	4,696	256	1,150	4,815
Cemetery	5/8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4"	843	1,178	2,344	3,522	2,356	294	-	-	-	-	-	-	294	843
	6"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		843	1,178	2,344	3,522	2,356	294	-	-	-	-	-	-	294	843
Irrigation	5/8"	3,975	2,111	7,760	9,871	4,222	823	419	53	752	805	106	67	890	4,394
	3/4"	187	123	187	310	246	26	346	546	978	1,524	1,092	127	153	533
	1"	6,251	3,874	10,099	13,973	7,748	1,164	690	274	1,142	1,416	548	118	1,282	6,941
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	6,814	2,443	10,681	13,124	4,886	1,094	-	-	-	-	-	-	1,094	6,814
	2"	19,333	8,311	31,251	39,562	16,622	3,297	-	-	-	-	-	-	3,297	19,333
	3"	4,489	3,476	7,378	10,854	6,952	905	-	-	-	-	-	-	905	4,489
	4"	4,186	2,202	6,716	8,918	4,404	743	-	-	-	-	-	-	743	4,186
	6"	-	-	-	-	-	-	1,942	719	1,942	2,661	1,438	222	222	1,942
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		45,235	22,540	74,072	96,612	45,080	8,051	3,397	1,592	4,814	6,406	3,184	534	8,585	48,632
Totals:		345,910	541,318	779,702	1,321,020	1,082,636	110,085	38,174	42,695	77,803	120,498	85,390	10,042	120,127	384,084

* August + September
 ** October - March
 *** April - September



City of Camas Water Utility Summary of Consumption by Customer Class - WEIGHTED

*** Exclusion of codes 60, C57, C58, All Fire

Outside City Multiplier: 1.50

Customer Class	Meter Size	INSIDE CITY						OUTSIDE CITY						TOTAL	
		(1)	(2)	(3)	(2) + (3)	(2) x 2	(4)/12	(1)	(2)	(3)	(2) + (3)	(2) x 2	(4)/12	Annual Average	Peak Bi-Monthly
		Peak Bi-Month*	Winter Period**	Summer Period***	Total	Annualized Winter Average	Annual Average	Peak Bi-Month*	Winter Period**	Summer Period***	Total	Annualized Winter Average	Annual Average		
Residential	5/8"	176,605	220,728	364,925	585,653	441,456	48,804	30,723	36,471	62,418	98,889	72,942	8,241	57,045	207,328
	3/4"	5,967	5,525	11,340	16,865	11,050	1,405	26	24	51	75	48	6	1,412	5,993
	1"	12,109	17,199	25,636	42,835	34,398	3,570	1,050	762	1,898	2,660	1,524	222	3,791	13,159
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	2,683	5,264	6,729	11,993	10,528	999	-	-	-	-	-	-	999	2,683
	2"	2,502	3,602	5,169	8,771	7,204	731	-	-	-	-	-	-	731	2,502
	3"	581	869	1,495	2,364	1,738	197	-	-	-	-	-	-	197	581
	4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	200,447	253,187	415,294	668,481	506,374	55,707	31,799	37,257	64,367	101,624	74,514	8,469	64,175	232,246
Commercial	5/8"	2,540	16,116	6,424	22,540	32,232	1,878	-	-	-	-	-	-	1,878	2,540
	3/4"	148	378	423	801	756	67	-	-	-	-	-	-	67	148
	1"	4,218	5,567	9,154	14,721	11,134	1,227	293	141	525	666	282	56	1,282	4,511
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	831	2,657	2,146	4,803	5,314	400	96	98	236	333	195	28	428	927
	2"	2,348	5,814	6,852	12,666	11,628	1,056	-	-	-	-	-	-	1,056	2,348
	3"	368	1,735	1,449	3,184	3,470	265	714	1,388	2,180	3,567	2,775	297	563	1,082
	4"	1,535	3,849	4,543	8,392	7,698	699	9,459	1,029	1,662	2,691	2,058	224	924	10,994
	6"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	11,988	36,116	30,991	67,107	72,232	5,592	10,562	2,655	4,602	7,257	5,310	605	6,197	22,550
Industrial	5/8"	14	163	164	327	326	27	-	-	-	-	-	-	27	14
	3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1"	54	17	71	88	34	7	-	-	-	-	-	-	7	54
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	769	1,797	2,167	3,964	3,594	330	-	-	-	-	-	-	330	769
	2"	14,427	47,621	47,007	94,628	95,242	7,886	-	-	-	-	-	-	7,886	14,427
	3"	1,350	3,493	4,519	8,012	6,986	668	-	-	-	-	-	-	668	1,350
	4"	26,946	66,218	73,542	139,760	132,436	11,647	8,780	18,221	39,435	57,656	36,441	4,805	16,451	35,726
	6"	39,706	105,301	122,483	227,784	210,602	18,982	-	-	-	-	-	-	18,982	39,706
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	83,266	224,610	249,953	474,563	449,220	39,547	8,780	18,221	39,435	57,656	36,441	4,805	44,352	92,046
City	5/8"	970	706	1,292	1,998	1,412	167	1,026	3,522	1,080	4,602	7,044	384	550	1,966
	3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1"	19	15	122	137	30	11	-	-	-	-	-	-	11	19
	1 1/4"	-	1	-	1	2	0	-	-	-	-	-	-	0	-
	1 1/2"	98	60	153	213	120	18	-	-	-	-	-	-	18	98
	2"	3,044	2,905	5,481	8,386	5,810	699	-	-	-	-	-	-	699	3,044
	3"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	4,131	3,687	7,048	10,735	7,374	895	1,026	3,522	1,080	4,602	7,044	384	1,278	5,157
Cemetery	5/8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	4"	843	1,178	2,344	3,522	2,356	284	-	-	-	-	-	-	284	843
	6"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	843	1,178	2,344	3,522	2,356	284	-	-	-	-	-	-	284	843
Irrigation	5/8"	3,975	2,111	7,760	9,871	4,222	823	629	80	1,128	1,208	159	101	923	4,604
	3/4"	187	123	187	310	246	26	519	819	1,467	2,286	1,638	191	216	706
	1"	6,251	3,874	10,099	13,973	7,748	1,164	1,035	411	1,713	2,124	822	177	1,341	7,286
	1 1/4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1 1/2"	6,814	2,443	10,681	13,124	4,886	1,094	-	-	-	-	-	-	1,094	6,814
	2"	19,333	8,311	31,251	39,562	16,622	3,297	-	-	-	-	-	-	3,297	19,333
	3"	4,489	3,476	7,378	10,854	6,952	905	-	-	-	-	-	-	905	4,489
	4"	4,186	2,202	6,716	8,918	4,404	743	-	-	-	-	-	-	743	4,186
	6"	-	-	-	-	-	-	2,913	1,079	2,913	3,992	2,157	333	333	2,913
	8"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	45,235	22,540	74,072	96,612	45,080	8,051	5,096	2,388	7,221	9,609	4,776	801	8,852	50,331
Totals:		345,910	541,318	779,702	1,321,020	1,082,636	110,085	57,261	64,043	116,705	180,747	128,085	15,062	125,147	403,171

* August + September
 ** October - March
 *** April - September



City of Camas Water Utility

Sample Bills (Monthly)

INSIDE CITY					
	Meter Size	Consumption	Current Rates (2003)	Proposed Phased-In 2004 Rates	Difference
Residential	5/8"	0	\$ 4.01	\$ 5.70	\$ 1.69
		5	10.31	11.50	1.19
		11.74	18.80	19.32	0.51
		15	22.91	23.10	0.19
Commercial	5/8"	0	\$ 4.01	\$ 5.70	\$ 1.69
		15	29.21	25.95	(3.26)
		30.90	55.92	47.41	(8.51)
		45	79.61	66.45	(13.16)
Industrial	2.0"	0	\$ 4.16	\$ 14.83	\$ 10.67
		1,000	1,084.16	1,134.83	50.67
		1,464.70	1,586.04	1,655.30	69.26
		2,000	2,164.16	2,254.83	90.67
Cemetery	4.0"	0	\$ 4.53	\$ 68.19	\$ 63.66
		200	116.53	180.19	63.66
		293.50	168.89	232.55	63.66
		400	228.53	292.19	63.66
Irrigation	5/8"	0	\$ 4.01	\$ 5.70	\$ 1.69
		50	42.01	43.70	1.69
		75.24	61.19	62.88	1.69
		100	80.01	81.70	1.69



City of Camas Water Utility

Water Sales Revenue Growth by Customer Class

Customer Classes	2003 Revenue Under Existing (2002) Rates	2004 Revenue Under Existing (2002) Rates	2005 Revenue Under Existing (2002) Rates	2006 Revenue Under Existing (2002) Rates	2007 Revenue Under Existing (2002) Rates	2008 Revenue Under Existing (2002) Rates	2009 Revenue Under Existing (2002) Rates
Residential	\$ 1,304,543	\$ 1,374,047	\$ 1,443,551	\$ 1,513,056	\$ 1,582,560	\$ 1,657,411	\$ 1,726,915
Commercial	141,672	149,220	156,768	164,316	171,864	179,993	187,541
Industrial	596,517	611,430	626,343	641,256	656,169	671,081	690,965
City	28,812	30,347	31,882	33,418	34,953	36,606	38,141
Cemetery	2,027	2,027	2,027	2,027	2,027	2,027	2,027
Irrigation	88,717	93,444	98,171	102,897	107,624	112,714	117,441
TOTAL	\$ 2,162,288	\$ 2,260,515	\$ 2,358,742	\$ 2,456,969	\$ 2,555,196	\$ 2,659,832	\$ 2,763,030

Composite Growth Rate	5.01%	4.54%	4.35%	4.16%	4.00%	4.10%	3.88%
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Total linked to Water Sales Revenue on O&M page



City of Camas Water Utility Fixed Asset Summary

Original Cost of Plant-in-Service

Function	PLANT-IN-SERVICE	TOTAL WATER	UTILITY-BUILT PLANT	CONTRIBUTED PLANT
1	Source of Supply	\$ 1,832,492	\$ 1,832,492	\$ -
2	Treatment	1,001,238	1,001,238	-
3	Transmission & Distribution	11,043,761	4,750,793	6,292,968
4	Storage	3,018,573	3,018,573	-
5	Pumping	2,906,640	2,906,640	-
6	Hydrants	692,265	50,106	642,159
7	Meters	191,381	191,381	-
8	Services	4,066,497	714,489	3,352,008
9	General Plant	1,216,919	1,216,919	-
	Total	\$ 25,969,766	\$ 15,682,631	\$ 10,287,135
	<i>Contingency Reserve</i>	259,698	156,826	102,871

Annual Depreciation Expense (Year 2003)

Function	PLANT-IN-SERVICE	TOTAL WATER	UTILITY-BUILT PLANT	CONTRIBUTED PLANT
1	Source of Supply	\$ 57,330	\$ 57,330	\$ -
2	Treatment	20,966	20,966	-
3	Transmission & Distribution	198,294	68,370	129,924
4	Storage	67,627	67,627	-
5	Pumping	88,205	88,205	-
6	Hydrants	17,307	1,253	16,054
7	Meters	2,918	2,918	-
8	Services	121,646	21,086	100,560
9	General Plant	146,852	146,852	-
	Total	\$ 721,145	\$ 474,607	\$ 246,538

Accumulative Depreciation (Year 2003)

Function	PLANT-IN-SERVICE	TOTAL WATER	UTILITY-BUILT PLANT	CONTRIBUTED PLANT
1	Source of Supply	\$ 1,203,357	\$ 1,203,357	\$ -
2	Treatment	364,328	364,328	-
3	Transmission & Distribution	1,808,048	776,561	1,031,486
4	Storage	777,650	777,650	-
5	Pumping	1,120,999	1,120,999	-
6	Hydrants	128,026	22,492	105,534
7	Meters	191,381	191,381	-
8	Services	1,025,264	390,066	635,198
9	General Plant	400,141	400,141	-
	Total	\$ 7,019,193	\$ 5,246,976	\$ 1,772,218



City of Camas Water Utility Growth Rates and Customer Projections

0.0575
0.47
0.7

Growth Rates by class, based on table of projected demand (MGD) by class (Master Plan p. E-3)

Factor	Customer Class	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Population	13,448	14,261	15,074	15,887	16,699	17,512	18,325	19,137	19,950	20,763	21,576	22,388	23,201	24,014	24,826	25,639	26,452
	Growth Rate		6.05%	5.70%	5.39%	5.11%	4.87%	4.64%	4.43%	4.25%	4.08%	3.92%	3.78%	3.63%	3.50%	3.38%	3.27%	3.17%
2	Residential/Commercial	1.9	1.9	2.01	2.13	2.24	2.35	2.47	2.58	2.70	2.82	2.93	3.04	3.16	3.27	3.38	3.50	3.62
	Growth Rate		5.96%	5.63%	5.33%	5.06%	4.81%	4.59%	4.38%	4.19%	4.02%	3.87%	3.72%	3.59%	3.47%	3.36%	3.23%	3.13%
3	Industrial	0.58	0.58	0.60	0.62	0.63	0.65	0.66	0.68	0.69	0.71	0.73	0.74	0.76	0.78	0.79	0.81	0.83
	Growth Rate		2.65%	3.45%	2.50%	2.44%	2.38%	2.33%	2.27%	2.22%	2.16%	2.11%	2.07%	2.03%	1.99%	1.95%	1.91%	1.86%
4	Waferteck, phase 1	0.47	0.47	0.5275	0.585	0.6425	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	Growth Rate		0.00%	6.31%	6.10%	5.60%	5.30%	3.48%	3.36%	3.47%	3.27%	3.04%	2.85%	2.87%	2.79%	2.71%	2.62%	2.67%
5	Overall Consumption Growth Rate																	
GROWTH EXCLUDING WAFERTECH				5.19%	5.13%	4.69%	4.48%	4.29%	4.11%	4.22%	3.94%	3.65%	3.52%	3.40%	3.29%	3.18%	3.29%	3.11%

NOT WEIGHTED (USED FOR CALCULATION OF CONNECTION CHARGES ONLY)

TOTAL INSIDE CITY

Factor	Customer Class	2001	Actual Meters		Future Meters													2003-2016 Future Meters																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
2	Residential		4,745	5,012	5,279	5,546	5,813	6,080	6,348	6,615	6,882	7,149	7,416	7,683	7,950	8,217	8,484	8,751	9,018	9,285	9,552	9,819	10,086	10,353	10,620	10,887	11,154	11,421	11,688	11,955	12,222	12,489	12,756	13,023	13,290	13,557	13,824	14,091	14,358	14,625	14,892	15,159	15,426	15,693	15,960	16,227	16,494	16,761	17,028	17,295	17,562	17,829	18,096	18,363	18,630	18,897	19,164	19,431	19,698	19,965	20,232	20,499	20,766	21,033	21,300	21,567	21,834	22,101	22,368	22,635	22,902	23,169	23,436	23,703	23,970	24,237	24,504	24,771	25,038	25,305	25,572	25,839	26,106	26,373	26,640	26,907	27,174	27,441	27,708	27,975	28,242	28,509	28,776	29,043	29,310	29,577	29,844	30,111	30,378	30,645	30,912	31,179	31,446	31,713	31,980	32,247	32,514	32,781	33,048	33,315	33,582	33,849	34,116	34,383	34,650	34,917	35,184	35,451	35,718	35,985	36,252	36,519	36,786	37,053	37,320	37,587	37,854	38,121	38,388	38,655	38,922	39,189	39,456	39,723	39,990	40,257	40,524	40,791	41,058	41,325	41,592	41,859	42,126	42,393	42,660	42,927	43,194	43,461	43,728	43,995	44,262	44,529	44,796	45,063	45,330	45,597	45,864	46,131	46,398	46,665	46,932	47,199	47,466	47,733	48,000	48,267	48,534	48,801	49,068	49,335	49,602	49,869	50,136	50,403	50,670	50,937	51,204	51,471	51,738	52,005	52,272	52,539	52,806	53,073	53,340	53,607	53,874	54,141	54,408	54,675	54,942	55,209	55,476	55,743	56,010	56,277	56,544	56,811	57,078	57,345	57,612	57,879	58,146	58,413	58,680	58,947	59,214	59,481	59,748	60,015	60,282	60,549	60,816	61,083	61,350	61,617	61,884	62,151	62,418	62,685	62,952	63,219	63,486	63,753	64,020	64,287	64,554	64,821	65,088	65,355	65,622	65,889	66,156	66,423	66,690	66,957	67,224	67,491	67,758	68,025	68,292	68,559	68,826	69,093	69,360	69,627	69,894	70,161	70,428	70,695	70,962	71,229	71,496	71,763	72,030	72,297	72,564	72,831	73,098	73,365	73,632	73,899	74,166	74,433	74,700	74,967	75,234	75,501	75,768	76,035	76,302	76,569	76,836	77,103	77,370	77,637	77,904	78,171	78,438	78,705	78,972	79,239	79,506	79,773	80,040	80,307	80,574	80,841	81,108	81,375	81,642	81,909	82,176	82,443	82,710	82,977	83,244	83,511	83,778	84,045	84,312	84,579	84,846	85,113	85,380	85,647	85,914	86,181	86,448	86,715	86,982	87,249	87,516	87,783	88,050	88,317	88,584	88,851	89,118	89,385	89,652	89,919	90,186	90,453	90,720	90,987	91,254	91,521	91,788	92,055	92,322	92,589	92,856	93,123	93,390	93,657	93,924	94,191	94,458	94,725	94,992	95,259	95,526	95,793	96,060	96,327	96,594	96,861	97,128	97,395	97,662	97,929	98,196	98,463	98,730	98,997	99,264	99,531	99,798	100,065	100,332	100,599	100,866	101,133	101,400	101,667	101,934	102,201	102,468	102,735	103,002	103,269	103,536	103,803	104,070	104,337	104,604	104,871	105,138	105,405	105,672	105,939	106,206	106,473	106,740	107,007	107,274	107,541	107,808	108,075	108,342	108,609	108,876	109,143	109,410	109,677	109,944	110,211	110,478	110,745	111,012	111,279	111,546	111,813	112,080	112,347	112,614	112,881	113,148	113,415	113,682	113,949	114,216	114,483	114,750	115,017	115,284	115,551	115,818	116,085	116,352	116,619	116,886	117,153	117,420	117,687	117,954	118,221	118,488	118,755	119,022	119,289	119,556	119,823	120,090	120,357	120,624	120,891	121,158	121,425	121,692	121,959	122,226	122,493	122,760	123,027	123,294	123,561	123,828	124,095	124,362	124,629	124,896	125,163	125,430	125,697	125,964	126,231	126,498	126,765	127,032	127,299	127,566	127,833	128,100	128,367	128,634	128,901	129,168	129,435	129,702	129,969	130,236	130,503	130,770	131,037	131,304	131,571	131,838	132,105	132,372	132,639	132,906	133,173	133,440	133,707	133,974	134,241	134,508	134,775	135,042	135,309	135,576	135,843	136,110	136,377	136,644	136,911	137,178	137,445	137,712	137,979	138,246	138,513	138,780	139,047	139,314	139,581	139,848	140,115	140,382	140,649	140,916	141,183	141,450	141,717	141,984	142,251	142,518	142,785	143,052	143,319	143,586	143,853	144,120	144,387	144,654	144,921	145,188	145,455	145,722	145,989	146,256	146,523	146,790	147,057	147,324	147,591	147,858	148,125	148,392	148,659	148,926	149,193	149,460	149,727	149,994	150,261	150,528	150,795	151,062	151,329	151,596	151,863	152,130	152,397	152,664	152,931	153,198	153,465	153,732	153,999	154,266	154,533	154,800	155,067	155,334	155,601	155,868	156,135	156,402	156,669	156,936	157,203	157,470	157,737	158,004	158,271	158,538	158,805	159,072	159,339	159,606	159,873	160,140	160,407	160,674	160,941	161,208	161,475	161,742	162,009	162,276	162,543	162,810	163,077	163,344	163,611	163,878	164,145	164,412	164,679	164,946	165,213	165,480	165,747	166,014	166,281	166,548	166,815	167,082	167,349	167,616	167,883	168,150	168,417	168,684	168,951	169,218	169,485	169,752	170,019	170,286	170,553	170,820	171,087	171,354	171,621	171,888	172,155	172,422	172,689	172,956	173,223	173,490	173,757	174,024	174,291	174,558	174,825	175,092	175,359	175,626	175,893	176,160	176,427	176,694	176,961	177,228	177,495	177,762	178,029	178,296	178,563	178,830	179,097	179,364	179,631	179,898	180,165	180,432	180,699	180,966	181,233	181,500	181,767	182,034	182,301	182,568	182,835	183,102	183,369	183,636	183,903	184,170	184,437	184,704	184,971	185,238	185,505	185,772	186,039	186,306	186,573	186,840	187,107	187,374	187,641	187,908	188,175	188,442	188,709	188,976	189,243	189,510	189,777	190,044	190,311	190,578	190,845	191,112	191,379	191,646	191,913	192,180	192,447	192,714	192,981	193,248	193,515	193,782	194,049	194,316	194,583	194,850	195,117	195,384	195,651	195,918	196,185	196,452	196,719	196,986	197,253	197,520	197,787	198,054	198,321	198,588	198,855	199,122	199,389	199,656	199,923	200,190	200,457	200,724	200,991	201,258	201,525	201,792	202,059	202,326	202,593	202,860	203,127	203,394	203,661	203,928	204,195	204,462	204,729	204,996	205,263	205,530	205,797	206,064	206,331	206,598	206,865	207,132	207,399	207,666	207,933	208,200	208,467	208,734	209,001	209,268	209,535	209,802	210,069	210,336	2

Technical Appendix C
Sewer Utility Spreadsheets



City of Camas Sewer Utility Input of Data and Assumptions

Economic & Financial Factors		2002	2003	2004	2005	2006	2007	2008
1	General Cost Inflation	3.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%
2	Labor Cost Inflation	3.00%	0.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3	Customer Growth	0.00%	4.32%	4.30%	3.97%	3.82%	3.68%	3.55%
4	Construction Cost Inflation	0.00%	0.00%	4.00%	4.00%	4.00%	4.00%	4.00%
5	State Excise Tax	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%
6	State B&O Tax	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
7	No Escalation	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
8	Fund Earnings	2.00%	2.00%	2.00%	4.00%	4.00%	4.00%	4.00%
9	General Inflation plus Growth	3.00%	4.32%	7.30%	6.97%	6.82%	6.68%	6.55%
	Cumulative Customer Growth	0.00%	4.32%	8.81%	13.13%	17.45%	21.77%	26.08%
Accounting Assumptions		2002	2003	2004	2005	2006	2007	2008
424 SEWER FUND								
	Beginning Operating Cash Balance [a]		\$ 544,733					
	Beginning Capital Cash Balance [b]		\$ 1,382,370					
	Restricted Balance for Existing Bond Reserves [c]		\$ 250,829					
FISCAL POLICY RESTRICTIONS								
	Minimum Working Capital (days of O&M expense)	60	60	60	60	60	60	60
	Minimum Capital Fund Balance - % of plant assets	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
REPLACEMENT FUNDING								
	<input type="checkbox"/> Do Not Fund Replacement Separate from CIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RESERVE UTILIZATION								
	Use of Cash Reserves to Meet Annual Obligations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
EXTERNAL FUNDING								
	Annual Amount of Interfund Assistance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Annual Repayment of Interfund Loans	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

[a] 2003 Beginning balance is combined water/sewer operating balances divided by 2 from City 2002 financial statement, less \$800,000 moved to Capital

[b] 2003 beginning balance is half the amount shown on the City 2002 financial statement worksheet for ending balances, plus \$800,000 from Operating

[c] 2003 Beginning balance is half of the combined water/sewer restricted bond reserve, \$501,658, from the balance sheet as of December 31, 2002



City of Camas Sewer Utility Input of Data and Assumptions

Capital Financing Assumptions	2002	2003	2004	2005	2006	2007	2008
GRANTS							
Proceeds Anticipated	\$ -	\$ 36,017	\$ -	\$ -	\$ -	\$ -	\$ -
SYSTEM DEVELOPMENT REVENUES							
System Development Charges	\$ 789,186	\$ 589,106	\$ 612,600	\$ 589,106	\$ 589,106	\$ 589,106	\$ 589,106
REVENUE BONDS							
Term (years)	20	20	20	20	20	20	20
Interest Cost	5.00%	5.00%	5.00%	6.00%	6.00%	6.00%	6.00%
Issuance Cost	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
PWTF LOANS							
Term (years)	20	20	20	20	20	20	20
Interest Cost	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
DOE LOANS							
Term (years)	20	20	20	20	20	20	20
Interest Cost	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Existing Debt Service - Revenue Bonds							
TOTAL REVENUE BONDS							
Annual Interest Payment	\$ 182,821	\$ 173,696	\$ 163,638	\$ 153,524	\$ 143,267	\$ 132,447	\$ 120,956
Annual Principal Payment	<u>194,346</u>	<u>230,648</u>	<u>235,069</u>	<u>245,481</u>	<u>253,231</u>	<u>269,206</u>	<u>282,783</u>
Total Annual Payment	\$ 377,167	\$ 404,344	\$ 398,707	\$ 399,005	\$ 396,498	\$ 401,653	\$ 403,739
Existing Debt Service - PWTF Loans							
TOTAL PUBLIC WORKS TRUST FUND LOANS							
Annual Interest Payment	\$ 29,025	\$ 28,746	\$ 27,055	\$ 25,364	\$ 23,673	\$ 21,982	\$ 20,291
Annual Principal Payment	<u>169,092</u>						
Total Annual Payment	\$ 198,117	\$ 197,838	\$ 196,147	\$ 194,456	\$ 192,765	\$ 191,074	\$ 189,383
Existing Debt Service - DOE Loans							
TOTAL DEPARTMENT OF ECOLOGY LOANS							
Annual Interest Payment	\$ 391,975	\$ 377,259	\$ 361,929	\$ 345,960	\$ 329,326	\$ 311,997	\$ 293,946
Annual Principal Payment	<u>352,997</u>	<u>367,713</u>	<u>383,042</u>	<u>399,011</u>	<u>415,646</u>	<u>432,974</u>	<u>451,025</u>
Total Annual Payment	\$ 744,972	\$ 744,972	\$ 744,971	\$ 744,971	\$ 744,972	\$ 744,971	\$ 744,971



City of Camas Sewer Utility Input of Data and Assumptions

424 Budget - Revenue	2002	2003	2004	2005	2006	2007	2008
REVENUES	<i>Actual</i>	<i>Budget</i>					
Sewage Sales	\$ 2,285,325						
Interfund Loan Revenue	103,009	101,908	101,508	101,108	100,708	77,308	-
Hookup Fees (other than SDCs)	2,450	1,000					
Industrial Contract Sales	24,951	42,750	101,250				
Miscellaneous Revenues	58,156	52,950					
Inspection Fees	19,100	15,000					
TOTAL REVENUES	\$ 2,492,991	\$ 213,608	\$ 202,758	\$ 101,108	\$ 100,708	\$ 77,308	\$ -

424 Budget - Expense	2002	2003	2004	2005	2006	2007	2008
SEWER FUND	<i>Actual</i>	<i>Budget</i>					
100 TAXES							
53 External Taxes & Operational Assessments	\$ 70,402	\$ 66,000					
[Other]	-	-					
Total Taxes	\$ 70,402	\$ 66,000	\$ -	\$ -	\$ -	\$ -	\$ -
810 COLLECTION							
11 Sewer Collection - Regular Salaries	\$ 571	\$ -					
12 Overtime	2,022	-					
21 Personnel Benefits	560	-					
31 Office and Operating Supplies	1,589	6,500					
35 Small Tools and Minor Equipment	2,769	500					
41 Professional Services	34	984					
42 Communication	-	1,000					
43 Travel	-	250					
45 Operating Rentals and Leases	-	500					
48 Repairs & Maintenance	9,141	30,000					
49 Miscellaneous	20	4,000					
95 Interfund Operating Rentals & Leases	22,525	30,000					
Total Collection	\$ 39,231	\$ 73,734	\$ -	\$ -	\$ -	\$ -	\$ -
811 PRESSURE COLLECTION							
11 Sewer Pressure Collection - Regular Salaries	\$ 54,025	\$ 53,852					
12 Overtime	12,399	13,977					
21 Personnel Benefits	16,540	18,585					
31 Office and Operating Supplies	61,255	45,000					
35 Small Tools and Minor Equipment	446	-					



City of Camas Sewer Utility Input of Data and Assumptions

41	Professional Services	289	-	10,000	-				
42	Communication	-	-		-				
45	Operating Rentals and Leases	1,015	-		-				
48	Repairs & Maintenance	13,381	7,500		-				
49	Miscellaneous	20	-		-				
95	Interfund Operating Rentals & Leases	<u>574</u>	<u>-</u>		-				
	Total Pressure Collection	\$ 159,944	\$ 138,915	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -
830 PUMPING									
11	Sewer Pumping - Regular Salaries	\$ 109,709	\$ 109,048						
12	Overtime	6,434	3,145						
21	Personnel Benefits	28,264	30,036						
31	Office and Operating Supplies	10,942	10,000						
35	Small Tools and Minor Equipment	1,039	500						
41	Professional Services	6,066	3,000						
42	Communication	366	500						
43	Travel	-	300						
45	Operating Rentals and Leases	4,669	7,500						
47	Public Utility	61,960	61,000						
48	Repairs & Maintenance	27,421	9,000						
49	Miscellaneous	11	53	300					
95	Interfund Operating Rentals & Leases	<u>4,181</u>	<u>4,000</u>						
	Total Pumping	\$ 261,062	\$ 238,082	\$ 300	\$ -	\$ -	\$ -	\$ -	\$ -
831 UTILITIES - PUMPING									
47	Public Utility	\$ 9,393	\$ 8,500						
	Total Utilities - Pumping	\$ 9,393	\$ 8,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
850 TREATMENT									
11	Sewer Treatment - Regular Salaries	\$ 108,706	\$ 109,745	\$ 171,911					
12	Overtime	3,936	2,846						
21	Personnel Benefits	27,386	30,060	47,088					
22	Uniforms & Clothing	-	-						
31	Office and Operating Supplies	136,808	21,000	5,000					
35	Small Tools and Minor Equipment	5,549	4,500						
36	Supplies - Chemicals [Caustic Soda]	24,951	95,000	225,000					
41	Professional Services	36,318	26,000						
42	Communication	1,643	4,000						
43	Travel	501	500						
45	Operating Rentals and Leases	3,655	4,000						
46	Insurance	-	88,269						
47	Public Utility	107,528	100,000						



City of Camas Sewer Utility Input of Data and Assumptions

48	Repairs & Maintenance	44,590	40,000				
49	Miscellaneous	9,058	13,000				
95	Interfund Operating Rentals & Leases	<u>1,510</u>	<u>2,500</u>				
	Total Treatment	\$ 512,139	\$ 541,419	\$ 448,999	\$ -	\$ -	\$ -
860 SERVICES							
11	Sewer Services - Regular Salaries	\$ -	\$ -				
12	Overtime	-	-				
21	Personnel Benefits	-	-				
45	Operating Rentals and Leases	-	-				
48	Repairs & Maintenance	129	500				
95	Interfund Operating Rentals & Leases	<u>182</u>	<u>-</u>				
	Total Services	\$ 311	\$ 500	\$ -	\$ -	\$ -	\$ -
538-100 ADMINISTRATION/GENERAL (50%)		<i>Other 50% to Water</i>					
11	Administration/General - Regular Salaries	\$ 43,909	\$ 45,396				
12	Overtime	322	-				
21	Personnel Benefits	11,415	10,232				
31	Office and Operating Supplies	1,243	1,500				
35	Small Tools and Minor Equipment	1,082	4,200				
41	Professional Services	10,175	1,600				
42	Communication	3,554	4,500				
43	Travel	661	500				
45	Operating Rentals and Leases	1,250	1,000				
46	Insurance	49,427	-				
47	Public Utility	59	-				
48	Repairs & Maintenance	-	-				
49	Miscellaneous	16,627	11,000				
91	Interfund Professional Services	203,656	158,953	173,460			
91A	Customer Billing (IF Prof Svcs - Acctg)	-	51,439	56,134			
95	Interfund Operating Rentals & Leases	<u>41,267</u>	<u>45,000</u>				
	Total Administration/General	\$ 384,645	\$ 335,320	\$ 229,594	\$ -	\$ -	\$ -
538-170 CUSTOMER SERVICE (50%)		<i>Other 50% to Water</i>					
11	Administration/General - Regular Salaries	\$ -	\$ -				
12	Overtime	-	-				
21	Personnel Benefits	-	-				
31	Office and Operating Supplies	2,676	1,000				
35	Small Tools and Minor Equipment	2,517	2,000				
41	Professional Services	5,093	11,000	1,000			
42	Communication	194	250				
43	Travel	117	100				



City of Camas Sewer Utility Input of Data and Assumptions

45	Operating Rentals and Leases	-	-				
48	Repairs & Maintenance	1,844	1,000				
49	Miscellaneous	100	1,750				
91	Interfund Professional Services	-	6,000				
95	Interfund Operating Rentals & Leases	<u>2,850</u>	<u>4,000</u>				
	Total Customer Service	\$ 15,388	\$ 27,100	\$ 1,000	\$ -	\$ -	\$ -
TOTAL SEWER FUND BUDGET		\$ 1,452,515	\$ 1,429,571	\$ 689,893	\$ -	\$ -	\$ -
534 30 DEPRECIATION EXPENSE							
	Depreciation Expense [a]	\$ 652,518	<i>Enter only the expense for the first year of the analysis; all subsequent years are calculated.</i>				



City of Camas Sewer Utility Capital Improvement Program

Cost in Year:

2003

Improvement Projects (Upgrades & Expansions)

TOTAL FORECASTED PROJECT COSTS

Rank	Function	Current Cost	Year	Description	Life in Years	% Upgrade	% Expansion	Specific Funding Source	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
1	9	\$ 4,500	2003	6th Avenue Monitoring Upgrades	50	100%	0%	CALCULATED FUNDING	\$ -	\$ 4,500	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,500
2	4	434,333	2003	Caustic Soda System - STP	25	0%	100%	CALCULATED FUNDING	-	434,333	-	-	-	-	-	-	434,333
3	9	5,000	2004	Crown View Plaza Gravity Line Feasibility	15	100%	0%	CALCULATED FUNDING	-	-	5,200	-	-	-	-	-	5,200
4	9	5,000	2004	Bar Screen Panel Cover	10	50%	50%	CALCULATED FUNDING	-	-	5,200	-	-	-	-	-	5,200
5	9	7,500	2004	Pump Station Landscape Improvements	15	100%	0%	CALCULATED FUNDING	-	-	7,800	-	-	-	-	-	7,800
6	1	50,000	2004	Sewer Main Line, Joy St. to Main Pump Station	80	0%	100%	CALCULATED FUNDING	-	-	52,000	-	-	-	-	-	52,000
7	1	100,000	2004	Sewer Main Line, NW 6th, Logan to Drake	80	50%	50%	CALCULATED FUNDING	-	-	104,000	-	-	-	-	-	104,000
8	9	150,000	2004	Sewer Facility Plan Update	5	50%	50%	CALCULATED FUNDING	-	-	156,000	-	-	-	-	-	156,000
9	9	75,000	2004	Front Loader	10	50%	50%	CALCULATED FUNDING	-	-	78,000	-	-	-	-	-	78,000
10	9	16,500	2004	Boom Crane	25	50%	50%	CALCULATED FUNDING	-	-	17,160	-	-	-	-	-	17,160
11	3	200,000	2003	One Stop Pump Station Design & Construction	50	100%	0%	CALCULATED FUNDING	-	200,000	-	-	-	-	-	-	200,000
12	4	100,000	2006	PRE Design STP Solids	50	50%	50%	CALCULATED FUNDING	-	-	-	-	112,486	-	-	-	112,486
13	1	1,338,480	2006	Joy Street Sewer Main Extension	80	25%	75%	CALCULATED FUNDING	-	-	-	-	1,505,608	-	-	-	1,505,608
14	3	1,352,000	2007	Main Lift Station Upgrade	25	50%	50%	CALCULATED FUNDING	-	-	-	-	-	1,581,649	-	-	1,581,649
15	4	450,000	2007	Design STP Solids	50	50%	50%	CALCULATED FUNDING	-	-	-	-	-	526,436	-	-	526,436
16	4	2,800,000	2008	Construction STP Solids	50	50%	50%	CALCULATED FUNDING	-	-	-	-	-	-	3,406,628	-	3,406,628
17	2	967,000	2009	Sewer Main River Crossing to STP	80	0%	100%	CALCULATED FUNDING	-	-	-	-	-	-	-	1,223,563	1,223,563
18	1	80,000	2010	Lacamas Sewer Extension, Crown	50	0%	100%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
19	1	85,000	2010	Lacamas Sewer Extension, Crown	50	0%	100%	DEVELOPER-FUNDED	-	-	-	-	-	-	-	-	-
20	1	92,000	2010	West Camas Main Upsize	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
21	3	413,000	2010	Sewer Pump Station, Bybee	50	0%	100%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
22	3	500,000	2010	Sewer Pump Station, Bybee	50	0%	100%	DEVELOPER-FUNDED	-	-	-	-	-	-	-	-	-
23	2	600,000	2010	38th Force & Gravity Main	80	0%	100%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
24	2	672,000	2010	38th Force & Gravity Main	80	0%	100%	DEVELOPER-FUNDED	-	-	-	-	-	-	-	-	-
25	9	100,000	2010	Sewer Plan Update	5	50%	50%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
26					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
27					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
28					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
29					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
30					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
31					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
32					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
33					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
34					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
35					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
		\$ 10,597,313	Total Improvement Projects			\$ 3,217,870	\$ 7,379,443		\$ -	\$ 638,833	\$ 425,360	\$ -	\$ 1,618,094	\$ 2,108,085	\$ 3,406,628	\$ 1,223,563	\$ 9,420,564



City of Camas Sewer Utility Capital Improvement Program

Repair and Replacement Projects

TOTAL FORECASTED PROJECT COSTS

Rank	Function	Current Cost	Year	Description	Life in Years	% Upgrade	% Expansion	Specific Funding Source	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL	
1	1	\$ 584,000	2004	PWTF Water/Sewer Replacement	50	100%	0%	CALCULATED FUNDING	\$ -	\$ -	\$ 607,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 607,360	
2	6	7,500	2004	Replace Manhole - NE 2nd and Joy	80	100%	0%	CALCULATED FUNDING	-	-	7,800	-	-	-	-	-	7,800	
3	1	75,000	2007	Miscellaneous Sewer Main Repair	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	87,739	-	-	87,739	
4	1	75,000	2008	Miscellaneous Sewer Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	91,249	-	91,249	
5	1	75,000	2009	Miscellaneous Sewer Line Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	94,899	94,899	
6	1	75,000	2010	Sewer Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
7	1	75,000	2011	Sewer Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
8	1	75,000	2012	Sewer Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
9	1	75,000	2013	Sewer Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
10	1	75,000	2014	Sewer Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
11	1	75,000	2015	Sewer Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
12	1	75,000	2016	Sewer Main Replacement	80	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
13					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
14					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
15					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
16					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
17					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
18					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
19					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
20					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
21					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
22					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
23					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
24					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
25					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
26					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
27					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
28					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
29					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
30					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
31					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
32					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
33					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
34					50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-	
		\$ 1,341,500	Total Repair & Replacement Projects							\$ -	\$ -	\$ 615,160	\$ -	\$ -	\$ 87,739	\$ 91,249	\$ 94,899	\$ 889,047
		\$ 11,938,813	Total Capital Costs							\$ -	\$ 638,833	\$ 1,040,520	\$ -	\$ 1,618,094	\$ 2,195,825	\$ 3,497,877	\$ 1,318,462	\$ 10,309,611

Summary of Cost by Function - Upgrades & Expansions

Function	Description	Total Cost
1	Collection Mains	\$ 1,745,480
2	Force Mains	2,239,000
3	Pumping	2,465,000
4	Treatment	3,784,333
5	Services	-
6	Manholes	-
9	General Plant	383,500
Total Capital Costs		\$ 10,597,313

Summary of Cost by Function and Year - Upgrades & Expansions

Function	Description	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
1	Collection Mains	\$ -	\$ -	\$ 156,000	\$ -	\$ 1,505,608	\$ -	\$ -	\$ -	\$ 1,661,608
2	Force Mains	-	-	-	-	-	-	-	1,223,563	1,223,563
3	Pumping	-	200,000	-	-	-	1,581,649	-	-	1,781,649
4	Treatment	-	434,333	-	-	112,486	526,436	3,406,628	-	4,479,884
5	Services	-	-	-	-	-	-	-	-	-
6	Manholes	-	-	-	-	-	-	-	-	-
9	General Plant	-	4,500	269,360	-	-	-	-	-	273,860
Total Capital Costs		\$ -	\$ 638,833	\$ 425,360	\$ -	\$ 1,618,094	\$ 2,108,085	\$ 3,406,628	\$ 1,223,563	\$ 9,420,564



City of Camas Sewer Utility Capital Funding Analysis

Summary of Expenditures	2002	2003	2004	2005	2006	2007	2008
SEWER CAPITAL PROJECTS							
Improvement Upgrades	\$ -	\$ 204,500	\$ 193,180	\$ -	\$ 432,645	\$ 1,054,043	\$ 1,703,314
Expansions	-	434,333	232,180	-	1,185,449	1,054,043	1,703,314
Repairs and Replacements	-	-	615,160	-	-	87,739	91,249
TOTAL CAPITAL EXPENDITURES	\$ -	\$ 638,833	\$ 1,040,520	\$ -	\$ 1,618,094	\$ 2,195,825	\$ 3,497,877

Capital Financing Plan	2002	2003	2004	2005	2006	2007	2008
PROJECT-SPECIFIC FUNDING SOURCES							
Revenue Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PWTF Loans	-	-	-	-	-	-	-
DOE Loans	-	-	-	-	-	-	-
Developer Donations	-	-	-	-	-	-	-
Total Project-Specific Funding	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unfunded Capital Expenditures	-	638,833	1,040,520	-	1,618,094	2,195,825	3,497,877
DEFICIENCY IN CAPITAL CONTINGENCY	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OTHER FUNDING SOURCES							
Grants	-	36,017	-	-	-	-	-
System Development Charges	-	589,106	612,600	589,106	589,106	589,106	589,106
Interfund Loan Proceeds	-	101,908	101,508	101,108	100,708	77,308	-
Other Debt Proceeds [Note A]	-	-	-	-	-	1,040,000	2,950,000
Capital Fund Balance	-	-	326,412	-	928,281	489,411	-
Rates	-	-	-	-	-	-	-
Total General Resources	\$ -	\$ 727,030	\$ 1,040,520	\$ 690,214	\$ 1,618,094	\$ 2,195,825	\$ 3,539,106
TOTAL CAPITAL RESOURCES	\$ -	\$ 727,030	\$ 1,040,520	\$ 690,214	\$ 1,618,094	\$ 2,195,825	\$ 3,539,106
Unfunded Capital Expenditures	-	-	-	-	-	-	-
Additions Req. to Meet Contingency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Minimum Debt Needed (Enter Below)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Make sure above line zeroes when entering debt issue

NOTE A: OTHER DEBT OPTION

Specify debt instrument:	Revenue Bond						
Enter amount needed for projects:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,040,000	\$ 2,950,000



City of Camas Sewer Utility Capital Funding Analysis

New Debt Computations	2002	2003	2004	2005	2006	2007	2008
REVENUE BONDS							
Amount to Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,040,000	\$ 2,950,000
Issuance Costs	-	-	-	-	-	23,297	66,083
Reserve Required	-	-	-	-	-	<u>101,557</u>	<u>288,071</u>
Amount of Debt Issue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,164,854	\$ 3,304,154
PWTF LOANS							
Amount to Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OTHER LOANS							
Amount to Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Debt Service Summary							
	2002	2003	2004	2005	2006	2007	2008
EXISTING DEBT SERVICE							
Annual Interest Payments	\$ 603,821	\$ 579,701	\$ 552,622	\$ 524,848	\$ 496,266	\$ 466,426	\$ 435,193
Annual Principal Payments	<u>716,435</u>	<u>767,453</u>	<u>787,203</u>	<u>813,584</u>	<u>837,969</u>	<u>871,272</u>	<u>902,900</u>
Total Debt Service Payments	\$ 1,320,256	\$ 1,347,154	\$ 1,339,825	\$ 1,338,432	\$ 1,334,235	\$ 1,337,698	\$ 1,338,093
Revenue Bond Payments Only	377,167	404,344	398,707	399,005	396,498	401,653	403,739
NEW DEBT SERVICE							
Annual Interest Payments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 69,891	\$ 266,241
Annual Principal Payments	-	-	-	-	-	<u>31,666</u>	<u>123,388</u>
Total Debt Service Payments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 101,557	\$ 389,629
Revenue Bond Payments Only	-	-	-	-	-	101,557	389,629
TOTAL DEBT SERVICE PAYMENTS	\$ 1,320,256	\$ 1,347,154	\$ 1,339,825	\$ 1,338,432	\$ 1,334,235	\$ 1,439,255	\$ 1,727,722
Total Interest Payments	603,821	579,701	552,622	524,848	496,266	536,317	701,434
Total Principal Payments	716,435	767,453	787,203	813,584	837,969	902,938	1,026,288
Total Revenue Bond Payments Only	377,167	404,344	398,707	399,005	396,498	503,210	793,368



City of Camas Sewer Utility Operating Revenue and Expenditure Forecast

Actual

Revenues	FORECAST BASIS	2002	2003	2004	2005	2006	2007	2008
REVENUES								
Sewage Sales	<i>Customer Growth by Class</i>	\$ 2,285,325	\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 2,965,358	\$ 3,075,458	\$ 3,185,557
Hookup Fees (other than SDCs)	<i>Customer Growth</i>	2,450	1,000	1,043	1,084	1,126	1,167	1,209
Industrial Contract Sales	<i>General Cost Inflation</i>	24,951	42,750	101,250	104,288	107,416	110,639	113,958
Miscellaneous Revenues	<i>No Escalation</i>	58,156	52,950	52,950	52,950	52,950	52,950	52,950
Inspection Fees	<i>Customer Growth</i>	19,100	15,000	15,646	16,267	16,888	17,509	18,130
TOTAL REVENUE		\$ 2,389,982	\$ 2,615,294	\$ 2,916,048	\$ 3,029,848	\$ 3,143,738	\$ 3,257,722	\$ 3,371,803

Expenditures	FORECAST BASIS	2002	2003	2004	2005	2006	2007	2008
SEWER FUND								
100 TAXES								
53 External Taxes & Operational Assessments	<i>Excise & B&O Tax</i>	\$ 70,402	\$ 94,177	\$ 99,875	\$ 103,185	\$ 106,827	\$ 110,448	\$ 114,046
[Other]		-	-	-	-	-	-	-
Total Taxes		\$ 70,402	\$ 94,177	\$ 99,875	\$ 103,185	\$ 106,827	\$ 110,448	\$ 114,046
810 COLLECTION								
11 Sewer Collection - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 571	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12 Overtime	<i>Labor Cost Inflation</i>	2,022	-	-	-	-	-	-
21 Personnel Benefits	<i>Labor Cost Inflation</i>	560	-	-	-	-	-	-
31 Office and Operating Supplies	<i>General Inflation + Growth</i>	1,589	6,500	6,975	7,461	7,970	8,502	9,058
35 Small Tools and Minor Equipment	<i>General Cost Inflation</i>	2,769	500	515	530	546	563	580
41 Professional Services	<i>General Cost Inflation</i>	34	984	1,014	1,044	1,075	1,108	1,141
42 Communication	<i>General Cost Inflation</i>	-	1,000	1,030	1,061	1,093	1,126	1,159
43 Travel	<i>General Cost Inflation</i>	-	250	258	265	273	281	290
45 Operating Rentals and Leases	<i>General Cost Inflation</i>	-	500	515	530	546	563	580
48 Repairs & Maintenance	<i>General Cost Inflation</i>	9,141	30,000	30,900	31,827	32,782	33,765	34,778
49 Miscellaneous	<i>General Cost Inflation</i>	20	4,000	4,120	4,244	4,371	4,502	4,637
95 Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	22,525	30,000	30,900	31,827	32,782	33,765	34,778
Total Collection		\$ 39,231	\$ 73,734	\$ 76,226	\$ 78,789	\$ 81,438	\$ 84,174	\$ 87,001
811 PRESSURE COLLECTION								
11 Sewer Pressure Collection - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 54,025	\$ 53,852	\$ 55,468	\$ 57,132	\$ 58,846	\$ 60,611	\$ 62,429
12 Overtime	<i>Labor Cost Inflation</i>	12,399	13,977	14,397	14,829	15,274	15,732	16,204
21 Personnel Benefits	<i>Labor Cost Inflation</i>	16,540	18,585	19,143	19,717	20,309	20,918	21,545



City of Camas Sewer Utility Operating Revenue and Expenditure Forecast

			<i>Actual</i>						
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	61,255	45,000	48,287	51,652	55,174	58,858	62,711
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	446	-	-	-	-	-	-
41	Professional Services	<i>General Cost Inflation</i>	289	-	10,000	-	-	-	-
42	Communication	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	1,015	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	13,381	7,500	7,725	7,957	8,195	8,441	8,695
49	Miscellaneous	<i>General Cost Inflation</i>	20	-	-	-	-	-	-
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	574	-	-	-	-	-	-
	Total Pressure Collection		\$ 159,944	\$ 138,915	\$ 155,019	\$ 151,286	\$ 157,797	\$ 164,560	\$ 171,584
830 PUMPING									
11	Sewer Pumping - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 109,709	\$ 109,048	\$ 112,319	\$ 115,689	\$ 119,159	\$ 122,734	\$ 126,416
12	Overtime	<i>Labor Cost Inflation</i>	6,434	3,145	3,239	3,336	3,436	3,540	3,646
21	Personnel Benefits	<i>Labor Cost Inflation</i>	28,264	30,036	30,937	31,866	32,822	33,806	34,820
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	10,942	10,000	10,730	11,478	12,261	13,080	13,936
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	1,039	500	515	530	546	563	580
41	Professional Services	<i>General Cost Inflation</i>	6,066	3,000	3,090	3,183	3,278	3,377	3,478
42	Communication	<i>General Cost Inflation</i>	366	500	515	530	546	563	580
43	Travel	<i>General Cost Inflation</i>	-	300	309	318	328	338	348
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	4,669	7,500	7,725	7,957	8,195	8,441	8,695
47	Public Utility	<i>General Inflation + Growth</i>	61,960	61,000	65,456	70,018	74,791	79,785	85,008
48	Repairs & Maintenance	<i>General Cost Inflation</i>	27,421	9,000	9,270	9,548	9,835	10,130	10,433
49	Miscellaneous	<i>General Cost Inflation</i>	11	53	300	309	318	328	338
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	4,181	4,000	4,120	4,244	4,371	4,502	4,637
	Total Pumping		\$ 261,062	\$ 238,082	\$ 248,526	\$ 259,006	\$ 269,887	\$ 281,185	\$ 292,914
831 UTILITIES - PUMPING									
47	Public Utility	<i>General Inflation + Growth</i>	\$ 9,393	\$ 8,500	\$ 9,121	\$ 9,757	\$ 10,422	\$ 11,118	\$ 11,845
	Total Utilities - Pumping		\$ 9,393	\$ 8,500	\$ 9,121	\$ 9,757	\$ 10,422	\$ 11,118	\$ 11,845
850 TREATMENT									
11	Sewer Treatment - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 108,706	\$ 109,745	\$ 171,911	\$ 177,068	\$ 182,380	\$ 187,852	\$ 193,487
12	Overtime	<i>Labor Cost Inflation</i>	3,936	2,846	2,931	3,019	3,110	3,203	3,299
21	Personnel Benefits	<i>Labor Cost Inflation</i>	27,386	30,060	47,088	48,501	49,956	51,454	52,998
22	Uniforms & Clothing	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	136,808	21,000	5,000	5,348	5,713	6,095	6,494
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	5,549	4,500	4,635	4,774	4,917	5,065	5,217



City of Camas Sewer Utility Operating Revenue and Expenditure Forecast

			<i>Actual</i>						
36	Supplies - Chemicals [Caustic Soda]	<i>General Cost Inflation</i>	24,951	95,000	225,000	231,750	238,703	245,864	253,239
41	Professional Services	<i>General Cost Inflation</i>	36,318	26,000	26,780	27,583	28,411	29,263	30,141
42	Communication	<i>General Cost Inflation</i>	1,643	4,000	4,120	4,244	4,371	4,502	4,637
43	Travel	<i>General Cost Inflation</i>	501	500	515	530	546	563	580
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	3,655	4,000	4,120	4,244	4,371	4,502	4,637
46	Insurance	<i>General Cost Inflation</i>	-	88,269	90,917	93,645	96,454	99,348	102,328
47	Public Utility	<i>General Inflation + Growth</i>	107,528	100,000	107,305	114,783	122,608	130,795	139,358
48	Repairs & Maintenance	<i>General Cost Inflation</i>	44,590	40,000	41,200	42,436	43,709	45,020	46,371
49	Miscellaneous	<i>General Cost Inflation</i>	9,058	13,000	13,390	13,792	14,205	14,632	15,071
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	1,510	2,500	2,575	2,652	2,732	2,814	2,898
	Total Treatment		\$ 512,139	\$ 541,419	\$ 747,488	\$ 774,370	\$ 802,187	\$ 830,971	\$ 860,755
860 SERVICES									
11	Sewer Services - Regular Salaries	<i>Labor Cost Inflation</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Overtime	<i>Labor Cost Inflation</i>	-	-	-	-	-	-	-
21	Personnel Benefits	<i>Labor Cost Inflation</i>	-	-	-	-	-	-	-
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	129	500	515	530	546	563	580
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	182	-	-	-	-	-	-
	Total Services		\$ 311	\$ 500	\$ 515	\$ 530	\$ 546	\$ 563	\$ 580
538-100 ADMINISTRATION/GENERAL (50%)									
11	Administration/General - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 43,909	\$ 45,396	\$ 46,758	\$ 48,161	\$ 49,606	\$ 51,094	\$ 52,627
12	Overtime	<i>Labor Cost Inflation</i>	322	-	-	-	-	-	-
21	Personnel Benefits	<i>Labor Cost Inflation</i>	11,415	10,232	10,539	10,855	11,181	11,516	11,862
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	1,243	1,500	1,610	1,722	1,839	1,962	2,090
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	1,082	4,200	4,326	4,456	4,589	4,727	4,869
41	Professional Services	<i>General Cost Inflation</i>	10,175	1,600	1,648	1,697	1,748	1,801	1,855
42	Communication	<i>General Cost Inflation</i>	3,554	4,500	4,635	4,774	4,917	5,065	5,217
43	Travel	<i>General Cost Inflation</i>	661	500	515	530	546	563	580
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	1,250	1,000	1,030	1,061	1,093	1,126	1,159
46	Insurance	<i>General Cost Inflation</i>	49,427	-	-	-	-	-	-
47	Public Utility	<i>General Inflation + Growth</i>	59	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
49	Miscellaneous	<i>General Cost Inflation</i>	16,627	11,000	11,330	11,670	12,020	12,381	12,752
91	Interfund Professional Services	<i>General Cost Inflation</i>	203,656	158,953	173,460	178,664	184,024	189,544	195,231



City of Camas Sewer Utility Operating Revenue and Expenditure Forecast

		<i>Actual</i>							
91A	Customer Billing (IF Prof Svcs - Acctg)	<i>General Inflation + Growth</i>	-	51,439	56,134	60,046	64,140	68,422	72,902
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	<u>41,267</u>	<u>45,000</u>	<u>46,350</u>	<u>47,741</u>	<u>49,173</u>	<u>50,648</u>	<u>52,167</u>
	Total Administration/General		\$ 384,645	\$ 335,320	\$ 358,335	\$ 371,377	\$ 384,876	\$ 398,849	\$ 413,310
538-170 CUSTOMER SERVICE (50%)									
11	Administration/General - Regular Salaries	<i>Labor Cost Inflation</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Overtime	<i>Labor Cost Inflation</i>	-	-	-	-	-	-	-
21	Personnel Benefits	<i>Labor Cost Inflation</i>	-	-	-	-	-	-	-
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	2,676	1,000	1,073	1,148	1,226	1,308	1,394
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	2,517	2,000	2,060	2,122	2,185	2,251	2,319
41	Professional Services	<i>General Cost Inflation</i>	5,093	11,000	1,000	1,030	1,061	1,093	1,126
42	Communication	<i>General Cost Inflation</i>	194	250	258	265	273	281	290
43	Travel	<i>General Cost Inflation</i>	117	100	103	106	109	113	116
45	Operating Rentals and Leases	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	1,844	1,000	1,030	1,061	1,093	1,126	1,159
49	Miscellaneous	<i>General Cost Inflation</i>	100	1,750	1,803	1,857	1,912	1,970	2,029
91	Interfund Professional Services	<i>General Inflation + Growth</i>	-	6,000	6,438	6,887	7,357	7,848	8,361
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	<u>2,850</u>	<u>4,000</u>	<u>4,120</u>	<u>4,244</u>	<u>4,371</u>	<u>4,502</u>	<u>4,637</u>
	Total Customer Service		\$ 15,388	\$ 27,100	\$ 17,884	\$ 18,719	\$ 19,587	\$ 20,491	\$ 21,430
TOTAL SEWER FUND BUDGET			\$ 1,452,515	\$ 1,457,748	\$ 1,712,989	\$ 1,767,020	\$ 1,833,567	\$ 1,902,357	\$ 1,973,466
534 30 DEPRECIATION EXPENSE									
	Depreciation Expense [a]	<i>Calc'd from "Input" and "Capital"</i>	\$ 652,518	\$ 673,981	\$ 729,249	\$ 729,249	\$ 750,319	\$ 825,210	\$ 894,483
TOTAL EXPENSES			\$ 2,105,032	\$ 2,131,729	\$ 2,442,238	\$ 2,496,268	\$ 2,583,886	\$ 2,727,567	\$ 2,867,949
less: Depreciation (Non-Cash Expense)			<u>(652,518)</u>	<u>(673,981)</u>	<u>(729,249)</u>	<u>(729,249)</u>	<u>(750,319)</u>	<u>(825,210)</u>	<u>(894,483)</u>
CASH OPERATING EXPENDITURES			\$ 1,452,515	\$ 1,457,748	\$ 1,712,989	\$ 1,767,020	\$ 1,833,567	\$ 1,902,357	\$ 1,973,466



City of Camas Sewer Utility Revenue Requirements Analysis

Cash Flow Sufficiency Test	2002	2003	2004	2005	2006	2007	2008
EXPENSES							
Cash Operating Expenses	\$ 1,452,515	\$ 1,457,748	\$ 1,712,989	\$ 1,767,020	\$ 1,833,567	\$ 1,902,357	\$ 1,973,466
Existing Debt Service	1,320,256	1,347,154	1,339,825	1,338,432	1,334,235	1,337,698	1,338,093
New Debt Service	-	-	-	-	-	101,557	389,629
Interfund Loan Repayment (to other funds)	-	-	-	-	-	-	-
Rate-Funded Capital Improvement Program	-	-	-	-	-	-	-
Depreciation Funding	-	-	-	-	-	-	-
Additions Required to Meet Minimum Working Capital	-	-	-	43,762	10,939	11,308	11,689
Total Expenses	\$ 2,772,771	\$ 2,804,902	\$ 3,052,814	\$ 3,149,213	\$ 3,178,742	\$ 3,352,920	\$ 3,712,876
REVENUES							
Sewer Sales [Including adopted increases]	\$ 2,285,325	\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 2,965,358	\$ 3,075,458	\$ 3,185,557
Industrial Contract Sales	24,951	42,750	101,250	104,288	107,416	110,639	113,958
Other Revenue	79,706	68,950	69,639	70,301	70,964	71,626	72,288
Operating Fund Interest Earnings	-	15,911	12,437	19,901	21,652	22,089	26,604
Interfund Resources	-	-	-	-	-	-	-
Use of Reserves	-	-	-	-	-	-	-
Total Revenue	\$ 2,389,982	\$ 2,631,205	\$ 2,928,486	\$ 3,049,749	\$ 3,165,390	\$ 3,279,812	\$ 3,398,407
CASH TEST REVENUE DEFICIENCY (SURPLUS)	\$ 382,789	\$ 173,697	\$ 124,329	\$ 99,464	\$ 13,352	\$ 73,108	\$ 314,469
Coverage Sufficiency Test							
	2002	2003	2004	2005	2006	2007	2008
EXPENSES							
Cash Operating Expenses	\$ 1,452,515	\$ 1,457,748	\$ 1,712,989	\$ 1,767,020	\$ 1,833,567	\$ 1,902,357	\$ 1,973,466
Revenue Bond Debt Service	377,167	404,344	398,707	399,005	396,498	503,210	793,368
Revenue Bond Coverage Requirement:	1.4 150,867	161,738	159,483	159,602	158,599	201,284	317,347
Total Expenses	\$ 1,980,548	\$ 2,023,830	\$ 2,271,179	\$ 2,325,627	\$ 2,388,665	\$ 2,606,851	\$ 3,084,180
ALLOWABLE REVENUES							
Sewer Sales	\$ 2,285,325	\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 2,965,358	\$ 3,075,458	\$ 3,185,557
Industrial Contract Sales	24,951	42,750	101,250	104,288	107,416	110,639	113,958
Other Revenue	79,706	68,950	69,639	70,301	70,964	71,626	72,288
System Development Charges	789,186	589,106	612,600	589,106	589,106	589,106	589,106
Interest Earnings - All Funds	-	43,559	42,402	67,972	99,254	69,262	57,448
Total Revenue	\$ 3,179,168	\$ 3,247,958	\$ 3,571,050	\$ 3,686,925	\$ 3,832,098	\$ 3,916,090	\$ 4,018,357
Coverage Realized	4.58	4.43	4.66	4.81	5.04	4.00	2.58
COVERAGE TEST REVENUE DEFICIENCY (SURPLUS)	\$ (1,198,620)	\$ (1,224,129)	\$ (1,299,871)	\$ (1,361,299)	\$ (1,443,433)	\$ (1,309,239)	\$ (934,177)



City of Camas Sewer Utility Revenue Requirements Analysis

Rate Increase Required	2002	2003	2004	2005	2006	2007	2008
Maximum Deficiency From Tests	\$ -	\$ 173,697	\$ 124,329	\$ 99,464	\$ 13,352	\$ 73,108	\$ 314,469
Net Revenue From Prior Rate Increases	-	-	-	-	103,299	107,135	110,970
Revenue Deficiency	\$ -	\$ 173,697	\$ 124,329	\$ 99,464	\$ -	\$ -	\$ 203,499
Plus: Adjustment for State Excise Tax	-	6,955	4,978	3,983	-	-	8,148
Total Revenue Deficiency	\$ -	\$ 180,652	\$ 129,307	\$ 103,447	\$ -	\$ -	\$ 211,647
Rate Revenue Before Rate Increase (Incl. previous increases)	\$ 2,285,325	\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 3,072,794	\$ 3,186,882	\$ 3,300,971
Required Annual Rate Increase	0.00%	7.22%	4.71%	3.62%	0.00%	0.00%	6.41%
Number of Months New Rates Will Be In Effect	12	12	12	12	12	12	12
<i>Info: Percentage Increase to Generate Required Revenue</i>	0.00%	7.22%	4.71%	3.62%	0.00%	0.00%	6.41%
Policy Induced Rate Increases		0.00%	0.00%				
ANNUAL RATE INCREASE	0.00%	0.00%	0.00%	3.62%	0.00%	0.00%	6.41%
CUMULATIVE RATE INCREASE	0.00%	0.00%	0.00%	3.62%	3.62%	3.62%	10.27%
Full Year Rate Revenues After Rate Increase	\$ 2,285,325	\$ 2,503,594	\$ 2,745,160	\$ 2,958,706	\$ 3,072,794	\$ 3,186,882	\$ 3,512,618
Net Cash Flow After Rate Increase	(382,789)	(173,697)	(124,329)	43,762	100,887	45,335	11,689
Coverage After Rate Increase	4.58	4.43	4.66	5.06	5.30	4.21	2.97



City of Camas Sewer Utility Revenue Requirements Analysis

	2002	2003	2004	2005	2006	2007	2008
Projected Rate Revenues w/o Any Rate Increase	\$ 2,285,325	\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 2,965,358	\$ 3,075,458	\$ 3,185,557
Additional Revenues From 2002 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2003 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2004 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2005 Rate Increase	-	-	-	103,447	107,436	111,425	115,414
Additional Revenues From 2006 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2007 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2008 Rate Increase	-	-	-	-	-	-	211,647
Additional Revenues From 2009 Rate Increase	-	-	-	-	-	-	-
Total Additional Revenues From Rate Increases	\$ -	\$ -	\$ -	\$ 103,447	\$ 107,436	\$ 111,425	\$ 327,061
EFFECTIVE RATE REVENUES AFTER RATE INCREASE	\$ 2,285,325	\$ 2,503,594	\$ 2,745,160	\$ 2,958,706	\$ 3,072,794	\$ 3,186,882	\$ 3,512,618
<i>Adjustment for Partial Year Increase</i>	-	-	-	-	-	-	-
Additional State Excise Taxes							
Additional State Excise Taxes From 2002 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2003 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2004 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2005 Rate Increase	-	-	-	3,983	4,136	4,290	4,443
Additional State Excise Taxes From 2006 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2007 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2008 Rate Increase	-	-	-	-	-	-	8,148
Additional State Excise Taxes From 2009 Rate Increase	-	-	-	-	-	-	-
Total Additional State Excise taxes From Rate Increases	\$ -	\$ -	\$ -	\$ 3,983	\$ 4,136	\$ 4,290	\$ 12,592
Memorandum Items:							
Sales Revenue Growth	0.00%	9.55%	9.65%	4.01%	3.86%	3.71%	3.58%
State Excise Tax Rate	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%



City of Camas Sewer Utility Revenue Requirements Analysis

Fund Activity	2002	2003	2004	2005	2006	2007	2008
OPERATING FUND							
Beginning Balance	\$ -	\$ 544,733	\$ 371,036	\$ 246,707	\$ 290,469	\$ 301,408	\$ 312,716
plus: Net Cash Flow after Rate Increase	-	(173,697)	(124,329)	43,762	100,887	45,335	11,689
less: Transfer of Surplus to Capital Fund	-	-	-	-	(89,948)	(34,027)	-
Ending Balance	\$ 544,733	\$ 371,036	\$ 246,707	\$ 290,469	\$ 301,408	\$ 312,716	\$ 324,405
<i>Minimum Working Capital</i>		239,630	281,587	290,469	301,408	312,716	324,405
<i>Info: No of Days of Cash Operating Expenses</i>		93	53	60	60	60	60
CAPITAL FUND							
Beginning Balance	\$ -	\$ 1,382,370	\$ 1,498,215	\$ 1,201,767	\$ 1,940,051	\$ 1,179,320	\$ 771,109
plus: Depreciation Funding	-	-	-	-	-	-	-
plus: Developer Donations	-	-	-	-	-	-	-
plus: System Development Charges	-	589,106	612,600	589,106	589,106	589,106	589,106
plus: Grant Proceeds	-	36,017	-	-	-	-	-
plus: Net Debt Proceeds Available for Projects	-	-	-	-	-	1,040,000	2,950,000
plus: Interfund Loan Repayment	-	101,908	101,508	101,108	100,708	77,308	-
plus: Interest Earnings	-	27,647	29,964	48,071	77,602	47,173	30,844
plus: Transfer of Surplus from Operating Fund	-	-	-	-	89,948	34,027	-
less: Capital Fund Expenditures	-	(638,833)	(1,040,520)	-	(1,618,094)	(2,195,825)	(3,497,877)
Ending Balance	\$ 1,382,370	\$ 1,498,215	\$ 1,201,767	\$ 1,940,051	\$ 1,179,320	\$ 771,109	\$ 843,181
<i>Minimum Balance (Contingency)</i>	\$ -	\$ 672,635	\$ 693,445	\$ 693,445	\$ 725,807	\$ 769,724	\$ 839,681
BOND RESERVE							
Beginning Balance	\$ -	\$ 250,829	\$ 250,829	\$ 250,829	\$ 250,829	\$ 250,829	\$ 352,386
plus: Reserve Funding from New Debt	-	-	-	-	-	101,557	288,071
Ending Balance	\$ 250,829	\$ 250,829	\$ 250,829	\$ 250,829	\$ 250,829	\$ 352,386	\$ 640,458
<i>Minimum Reserve Balance</i>	-	250,829	250,829	250,829	250,829	352,386	640,458



City of Camas Sewer Utility

Summary of Revenue Requirements		2003	2004	2005	2006	2007	2008
SOURCES							
Rate Revenues Before Increase		\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 2,965,358	\$ 3,075,458	\$ 3,185,557
Industrial Contract Sales		42,750	101,250	104,288	107,416	110,639	113,958
Interest Earnings		15,911	12,437	19,901	21,652	22,089	26,604
Other Revenues		68,950	69,639	70,301	70,964	71,626	72,288
	TOTAL SOURCES	\$ 2,631,205	\$ 2,928,486	\$ 3,049,749	\$ 3,165,390	\$ 3,279,812	\$ 3,398,407
USES							
Taxes		\$ 94,177	\$ 99,875	\$ 103,185	\$ 106,827	\$ 110,448	\$ 114,046
Collection		73,734	76,226	78,789	81,438	84,174	87,001
Pressure Collection		138,915	155,019	151,286	157,797	164,560	171,584
Pumping		246,582	257,647	268,763	280,309	292,302	304,759
Treatment		541,419	747,488	774,370	802,187	830,971	860,755
Services		500	515	530	546	563	580
Administration/Interfund/Customer Service		362,420	376,219	390,096	404,463	419,339	434,740
Total Functional Uses		\$ 1,457,748	\$ 1,712,989	\$ 1,767,020	\$ 1,833,567	\$ 1,902,357	\$ 1,973,466
Debt Service							
Existing		\$ 1,347,154	\$ 1,339,825	\$ 1,338,432	\$ 1,334,235	\$ 1,337,698	\$ 1,338,093
New		-	-	-	-	101,557	389,629
Total Debt Service		\$ 1,347,154	\$ 1,339,825	\$ 1,338,432	\$ 1,334,235	\$ 1,439,255	\$ 1,727,722
Additions to Reserve		\$ -	\$ -	\$ 43,762	\$ 10,939	\$ 11,308	\$ 11,689
	TOTAL USES	\$ 2,804,902	\$ 3,052,814	\$ 3,149,213	\$ 3,178,742	\$ 3,352,920	\$ 3,712,876
INCREASE CALCULATION							
Rate Revenue Including Previous Increases		\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 3,072,794	\$ 3,186,882	\$ 3,300,971
Total Annual Revenue Deficiency*		180,652	129,307	103,447	-	-	211,647
	RATE REVENUE AFTER INCREASES	\$ 2,684,246	\$ 2,874,467	\$ 2,958,706	\$ 3,072,794	\$ 3,186,882	\$ 3,512,618
	Annual Rate Increase	0.00%	0.00%	3.62%	0.00%	0.00%	6.41%
	Cumulative Rate Increase	0.00%	0.00%	3.62%	3.62%	3.62%	10.27%

*After Excise Tax adjustment



City of Camas Sewer Utility

SEWER UTILITY

Summary of Capital Funding

	2003	2004	2005	2006	2007	2008
PROJECT COSTS						
Improvement Upgrades	\$ 204,500	\$ 193,180	\$ -	\$ 432,645	\$ 1,054,043	\$ 1,703,314
Expansions	434,333	232,180	-	1,185,449	1,054,043	1,703,314
Repairs & Replacements	-	615,160	-	-	87,739	91,249
TOTAL PROJECT COSTS	\$ 638,833	\$ 1,040,520	\$ -	\$ 1,618,094	\$ 2,195,825	\$ 3,497,877
SOURCES OF FUNDING						
Developer Contributions	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grants	36,017	-	-	-	-	-
System Development Charges	589,106	612,600	589,106	589,106	589,106	589,106
Interfund Loan Proceeds	101,908	101,508	101,108	100,708	77,308	-
Cash Balances	-	326,412	-	928,281	489,411	-
New Debt Proceeds	-	-	-	-	1,040,000	2,950,000
TOTAL SOURCES OF FUNDING	\$ 727,030	\$ 1,040,520	\$ 690,214	\$ 1,618,094	\$ 2,195,825	\$ 3,539,106
<i>Total New Debt Issued</i>	\$ -	\$ -	\$ -	\$ -	\$ 1,164,854	\$ 3,304,154



City of Camas Sewer Utility Functional Allocations

Allocation of Capital

PLANT-IN-SERVICE	TOTAL COSTS	FUNCTIONS OF SEWER SERVICE				AS ALL OTHERS	TOTAL	ALLOCATION BASIS
		CUSTOMER	FLOW	BOD	TSS			
Collection Mains	\$ 8,661,892	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	1997 SDC Study; Table 3-Phase I WWTP Improvements
Force Mains	1,628,204	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
Pumping	1,090,605	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
Treatment	19,756,670	0.00%	49.00%	33.00%	18.00%	0.00%	100.00%	
Services	1,135,694	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	
Manholes	376,044	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	
General Plant	343,803	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	
Total Utility Plant	\$ 32,992,913	\$ 1,135,694	\$ 21,437,514	\$ 6,519,701	\$ 3,556,201	\$ 343,803	\$ 32,992,913	
Sewer Service Functions		3.48%	65.66%	19.97%	10.89%		100.00%	
Allocation of "As All Others"		\$ 11,959	\$ 225,742	\$ 68,654	\$ 37,448	\$ (343,803)	\$ -	
TOTAL PLANT-IN-SERVICE	\$32,992,913	\$1,147,653	\$21,663,256	\$6,588,355	\$3,593,648	\$0	\$32,992,913	
Allocation Percentages	100.00%	3.48%	65.66%	19.97%	10.89%	0.00%	100.00%	
FUTURE FACILITIES	TOTAL COSTS	FUNCTIONS OF SEWER SERVICE				AS ALL OTHERS	TOTAL	ALLOCATION BASIS
		CUSTOMER	FLOW	BOD	TSS			
Collection Mains	\$ 3,079,480	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	All to Flow
Force Mains	2,239,000	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	All to Flow
Pumping	2,465,000	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	All to Flow
Treatment	3,784,333	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	Per Treatment Projects
Services	-	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	All to Customer
Manholes	7,500	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	All to Flow
General Plant	363,500	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Other
Total Future Improvements	\$ 11,938,813	\$ -	\$ 7,790,980	\$ -	\$ 3,784,333	\$ 363,500	\$ 11,938,813	
Sewer Service Functions		0.00%	67.31%	0.00%	32.69%		100.00%	
Allocation of "As All Others"		\$ -	\$ 244,660	\$ -	\$ 118,840	\$ (363,500)	\$ -	
TOTAL FUTURE FACILITIES	\$11,938,813	\$ -	\$ 8,035,640	\$ -	\$ 3,903,173	\$ -	\$ 11,938,813	
Allocation Percentages	100.00%	0.00%	67.31%	0.00%	32.69%	0.00%	100.00%	
TOTAL EXISTING & FUTURE	TOTAL COSTS	FUNCTIONS OF SEWER SERVICE				AS ALL OTHERS	TOTAL	ALLOCATION BASIS
		CUSTOMER	FLOW	BOD	TSS			
Existing & Future Treatment Plant	\$ 23,541,003	\$ -	\$ 9,680,768	\$ 6,519,701	\$ 7,340,534	\$ -	\$ 23,541,003	
All Other Plant-in-Service	21,390,722	1,135,694	19,547,725	-	-	707,303	21,390,722	
Total Plant	\$ 44,931,726	\$ 1,135,694	\$ 29,228,494	\$ 6,519,701	\$ 7,340,534	\$ 707,303	\$ 44,931,726	
Blended Treatment Plant Allocation		0.00%	41.12%	27.70%	31.18%		100.00%	
Total Sewer Plant Allocation		2.53%	65.05%	14.51%	16.34%	1.57%	100.00%	
Allocation of "As All Others"		\$ 18,164	\$ 467,466	\$ 104,273	\$ 117,401	\$ (707,303)	\$ -	
TOTAL	\$ 44,931,726	\$ 1,153,858	\$ 29,695,960	\$ 6,623,974	\$ 7,457,934	\$ -	\$ 44,931,726	
Allocation Percentages	100.00%	2.57%	66.09%	14.74%	16.60%	0.00%	100.00%	



City of Camas Sewer Utility Functional Allocations

Allocation of Operating Expenses

Test Year =>		2005						
OPERATING EXPENSE	TOTAL COSTS	FUNCTIONS OF SEWER SERVICE				AS ALL OTHERS	TOTAL	ALLOCATION BASIS
		CUSTOMER	FLOW	BOD	TSS			
18 TAXES	103,185	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Other
32 COLLECTION	78,789	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	As Collection Plant
45 PRESSURE COLLECTION	151,286	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	As Force Main Plant
60 PUMPING	259,006	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	As Pumping Plant
63 UTILITIES PUMPING	9,757	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	As Pumping Plant
81 TREATMENT	774,370	0.00%	41.12%	27.70%	31.18%	0.00%	100.00%	As Blended Treatment Plant
89 SERVICES	530	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	As Services Plant
ADMINISTRATION/GENERAL								
105 Customer Billing	60,046	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	All to Customer
107 All Other	311,331	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	As All Other
122 CUSTOMER SERVICE	18,719	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Other
Total Operating Expenses	\$ 1,767,020	\$ 371,907	\$ 817,282	\$ 214,462	\$ 241,463	\$ 121,904	\$ 1,767,020	
Sewer Service Functions		22.61%	49.68%	13.04%	14.68%		100.00%	
Allocation of "As All Others"		\$ 27,559	\$ 60,561	\$ 15,892	\$ 17,893	\$ (121,904)	\$ -	
TOTAL	\$ 1,767,020	\$ 399,466	\$ 877,844	\$ 230,354	\$ 259,356	\$ -	\$ 1,767,020	
Allocation Percentages	100.00%	22.61%	49.68%	13.04%	14.68%	0.00%	100.00%	



City of Camas Sewer Utility Functional Allocations

Allocation of Revenue Requirement

Design Rates For =>		2005		FUNCTIONS OF SEWER SERVICE				AS ALL OTHERS	TOTAL	ALLOCATION BASIS
REVENUE REQUIREMENT		TOTAL COSTS	CUSTOMER	FLOW	BOD	TSS				
OPERATING AND CAPITAL EXPENSES										
4	Cash Operating Expenses	\$ 1,767,020	22.61%	49.68%	13.04%	14.68%	0.00%	100.00%	As O&M Expense	
5	Existing Debt Service	1,338,432	3.48%	65.66%	19.97%	10.89%	0.00%	100.00%	As Existing Plant-in-Service	
6	New Debt Service	-	0.00%	67.31%	0.00%	32.69%	0.00%	100.00%	As Future Plant	
7	Interfund Loan Repayment (to Other Fund)	-	3.48%	65.66%	19.97%	10.89%	0.00%	100.00%	As Existing Plant-in-Service	
8	Rate Funded Capital Improvement Program	-	0.00%	67.31%	0.00%	32.69%	0.00%	100.00%	As Future Plant	
9	Depreciation Funding	-	3.48%	65.66%	19.97%	10.89%	0.00%	100.00%	As Existing Plant-in-Service	
Total Expenses		3,105,452	14.36%	56.57%	16.02%	13.05%	0.00%	100.00%		
OTHER REVENUES AND ADJUSTMENTS										
16	Less: Other Revenues	\$ (70,301)	22.61%	49.68%	13.04%	14.68%	0.00%	100.00%	As O&M Expense	
15	Less: Industrial Contract Sales	(104,288)	0.00%	0.00%	50.00%	50.00%	0.00%	100.00%	As Future Treatment	
17	Less: Operating Fund Interest Earnings	(19,901)	22.61%	49.68%	13.04%	14.68%	0.00%	100.00%	As O&M Expense	
18	Less: Interfund Resources	-	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others	
93	Plus: Additional State Excise Tax	3,983	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others	
64	Plus: Net Cash Flow after Rate Increase	43,762	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others	
82	Plus: Adjustment for Partial Year Increase	-	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others	
Rate Revenue Requirement		\$ 2,958,706	\$ 425,631	\$ 1,711,850	\$ 433,723	\$ 339,757	\$ 47,744	\$ 2,958,706		
Sewer Service Functions			14.62%	58.81%	14.90%	11.67%		100.00%		
Allocation of "As All Others"		\$ 6,981	\$ 28,077	\$ 7,114	\$ 5,573	\$ (47,744)	\$ -			
Rate Revenue Requirement		\$ 2,958,706	\$ 432,612	\$ 1,739,928	\$ 440,837	\$ 345,329	\$ -	\$ 2,958,706		
Allocation Percentages		100.00%	14.62%	58.81%	14.90%	11.67%	0.00%	100.00%		



City of Camas Sewer Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\Sewer 10-28.xls\CustAlloc

2004 Rates

Allocation of Customer Costs to Customer Classes

CUSTOMER COSTS	\$ 432,612		<i>using inside + outside weighted statistics</i>	
	Allocation Basis		Allocated Cost	Unit Costs
Customer Classes	No. of Units	% Share		
Residential	6,437	96.20%	\$ 416,192	\$ 5.39
Commercial & Industrial	253	3.78%	16,356	5.39
Wafertech Sewer	1	0.01%	65	5.39
TOTAL	6,691	100.00%	\$ 432,612	\$ 5.39



City of Camas Sewer Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\[Sewer 10-28.xls]CustAlloc

Allocation of Flow Costs to Customer Classes

FLOW COSTS		\$ 1,739,928		<i>using inside + outside weighted statistics</i>	
Customer Classes	Allocation Basis		Allocated Cost	Unit Costs	
	Contributed Flow	% Share			
Residential	582,289	52.62%	\$ 915,545	\$	1.57
Commercial & Industrial	337,253	30.48%	530,270		1.57
Wafertech Sewer	187,056	16.90%	294,112		1.57
TOTAL	1,106,597	100.00%	\$ 1,739,928	\$	1.57



City of Camas Sewer Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\Sewer 10-28.xls\CustAlloc

Allocation of BOD Costs to Customer Classes

BOD COSTS	\$ 440,837	<i>using inside + outside weighted statistics</i>		
Customer Classes	Allocation Basis		Allocated Cost	Unit Costs
	Contributed Flow	% Share		
Residential	582,289	52.62%	\$ 231,967	\$ 0.40
Commercial & Industrial	337,253	30.48%	134,352	0.40
Wafertech Sewer	187,056	16.90%	74,518	0.40
TOTAL	1,106,597	100.00%	\$ 440,837	\$ 0.40



City of Camas Sewer Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\[Sewer 10-28.xls]CustAlloc

Allocation of TSS Costs to Customer Classes

TSS COSTS		\$ 345,329 <i>using inside + outside weighted statistics</i>		
Customer Classes	Allocation Basis		Allocated Cost	Unit Costs
	Contributed Flow	% Share		
Residential	582,289	52.62%	\$ 181,711	\$ 0.31
Commercial & Industrial	337,253	30.48%	105,244	0.31
Wafertech Sewer	187,056	16.90%	58,373	0.31
TOTAL	1,106,597	100.00%	\$ 345,329	\$ 0.31



City of Camas Sewer Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\[Sewer 10-28.xls]CustAlloc

Summary of Allocations

Customer Classes	Customer	Flow	BOD	TSS	Total Revenue Req.	% Share
Residential	\$ 416,192	\$ 915,545	\$ 231,967	\$ 181,711	\$ 1,745,416	58.99%
Commercial & Industrial	16,356	530,270	134,352	105,244	786,222	26.57%
Wafertech Sewer	65	294,112	74,518	58,373	427,068	14.43%
TOTAL	\$ 432,612	\$ 1,739,928	\$ 440,837	\$ 345,329	\$ 2,958,706	100.00%



City of Camas Sewer Utility Customer Class Allocations

Date: 12/12/03
File: F:\Camas\Sewer 10-28.xls\CustAlloc

Cost of Service Comparison

Customer Classes	2005 Revenue Under Existing Rates	2005 Cost of Service	Indicated Increase/(Decrease)
Residential	\$ 1,779,103	\$ 1,745,416	-1.89%
Commercial & Industrial	766,133	786,222	2.62%
Wafertech Sewer	413,470	427,068	3.29%
TOTAL	\$ 2,958,706	\$ 2,958,706	0.00%

[a] using revenue per customer statistics multiplied by its % difference from financial statement BY CLASS from Sewer Price-Out; excludes "Not Available - Bond" category (\$383.00 revenue)



City of Camas Sewer Utility Unit Costs

Date: 12/12/2003
 Filename: F:\Camas\Sewer 10-28.xls]Unit Costs

Customer Costs

	Residential	Commercial & Industrial	Wafertech Sewer
Percent to be Recovered:	100.00%	100.00%	100.00%
Allocated Revenue Requirements:	\$ 416,192	\$ 16,356	\$ 65
Charge Basis: <i>No. of Billed Units</i>	77,246	3,036	12
Monthly Cost per Unit:	\$ 5.39	\$ 5.39	\$ 5.39

Flow Cost

	Residential	Commercial & Industrial	Wafertech Sewer
Percent to be Recovered:	100.00%	100.00%	100.00%
Allocated Revenue Requirements:	\$ 915,545	\$ 530,270	\$ 294,112
Charge Basis: <i>No. of Billed Units Contributed Flow</i>	77,246	337,253	187,056
Monthly Cost - Flow:	\$ 11.85	\$ 1.57	\$ 1.57

BOD Costs

	Residential	Commercial & Industrial	Wafertech Sewer
Percent to be Recovered:	100.00%	100.00%	100.00%
Allocated Revenue Requirements:	\$ 231,967	\$ 134,352	\$ 74,518
Charge Basis: <i>No. of Billed Units Contributed Flow</i>	77,246	337,253	187,056
Monthly Cost - BOD:	\$ 3.00	\$ 0.40	\$ 0.40

TSS Costs

	Residential	Commercial & Industrial	Wafertech Sewer
Percent to be Recovered:	100.00%	100.00%	100.00%
Allocated Revenue Requirements:	\$ 181,711	\$ 105,244	\$ 58,373
Charge Basis: <i>No. of Billed Units Contributed Flow</i>	77,246	337,253	187,056
Monthly Cost - TSS:	\$ 2.35	\$ 0.31	\$ 0.31



City of Camas Sewer Utility Unit Costs

Date: 12/12/2003
 Filename: F:\Camas[Sewer 10-28.xls]Unit Costs

Unit Cost Summary

INSIDE CITY

<i>Cost Component</i>	Residential	Commercial & Industrial	Wafertech Sewer
Customer	\$ 5.39	\$ 5.39	\$ 5.39
Flow	11.85	1.57	1.57
BOD	3.00	0.40	0.40
TSS	2.35	0.31	0.31

Base Charge: \$ 22.60 \$ 5.39 \$ 5.39
Volume Charge: \$ 2.28 \$ 2.28

OUTSIDE CITY

Outside City Multiplier: 1.5

<i>Cost Component</i>	Residential	Commercial & Industrial	Wafertech Sewer
Customer	\$ 8.08	\$ 8.08	\$ 8.08
Flow	17.78	2.36	2.36
BOD	4.50	0.60	0.60
TSS	3.53	0.47	0.47

Base Charge: \$ 33.89 \$ 8.08 \$ 8.08
Volume Charge: \$ 3.42 \$ 3.42



City of Camas Sewer Utility Rate Design

Date: 12/12/03
File: F:\Camas\[Sewer 10-28.xls]Rate Design

RATE DESIGN - OPTION A - COST OF SERVICE RATES - 2005

OUTSIDE CITY MULTIPLIER: 1.50

Usage-Based Customers

Rate Component	Customer Class				Rate Component	Customer Class			
	Residential		Commercial & Industrial			Residential		Commercial & Industrial	
	Inside City	Outside City	Inside City	Outside City		Inside City	Outside City	Inside City	Outside City
Flat Monthly Fee - \$/Unit	22.60	33.89	5.39	8.08	No. of Billed Units	69,118	5,418	2,943	69
Volume Charge - \$/ccf	-	-	2.28	3.42	Contributed Flow	-	-	519,660	3,099
					<i>Fixed Charge Revenue</i>	<i>1,561,770</i>	<i>183,645</i>	<i>15,859</i>	<i>561</i>
					<i>Volume Revenue</i>	<i>-</i>	<i>-</i>	<i>1,186,257</i>	<i>10,612</i>
					Total Revenues	1,561,770	183,645	1,202,116	11,174

Inside + Outside	1,745,416	1,213,290
Required Revenue	1,745,416	1,213,290
Surplus/(Deficit)	-	-

All Classes

Calculated Total Revenue	2,958,706	2,958,706
Required Total Revenue	2,958,706	2,958,706
Surplus/(Deficit)	-	-



**City of Camas
Sewer Utility
Proposed Rate Schedules: 2004-2009**

Residential							
	Customer Class	Year					
		2003	2004*	2005	2006	2007	2008
INSIDE CITY	Monthly Service Charge	\$ 20.75	\$ 22.25	\$ 22.60	\$ 23.05	\$ 23.55	\$ 24.05
OUTSIDE CITY	Monthly Service Charge	\$ 31.13	\$ 33.38	\$ 33.90	\$ 34.58	\$ 35.33	\$ 36.08

Commercial & Industrial							
	Customer Class	Year					
		2003	2004*	2005	2006	2007	2008
INSIDE CITY	Monthly Service Charge	\$ 4.65	\$ 4.65	\$ 5.00	\$ 5.25	\$ 5.50	\$ 5.75
	Volume Charge (\$/ccf)	2.10	2.15	2.25	2.30	2.35	2.45
OUTSIDE CITY	Monthly Service Charge	\$ 6.98	\$ 6.98	\$ 7.50	\$ 7.88	\$ 8.25	\$ 8.63
	Volume Charge (\$/ccf)	3.15	3.23	3.38	3.45	3.53	3.68

* Previously Adopted 2004 Rates



City of Camas Sewer Utility Sewer Sales Revenue Growth by Customer Class

Customer Classes	2003 Revenue Under Existing (2002) Rates	2004 Revenue Under Existing (2002) Rates	2005 Revenue Under Existing (2002) Rates	2006 Revenue Under Existing (2002) Rates	2007 Revenue Under Existing (2002) Rates	2008 Revenue Under Existing (2002) Rates
Single Family Residential	\$ 1,204,843	\$ 1,266,655	\$ 1,326,096	\$ 1,385,538	\$ 1,444,979	\$ 1,504,420
Multi-Family Residential	151,755	159,540	167,027	174,514	182,001	189,488
Commercial & Industrial	627,216	659,394	690,338	721,282	752,225	783,169
Residential/Commercial	16,687	17,543	18,367	19,190	20,013	20,836
Wafertech Sewer	383,519	383,519	383,519	383,519	383,519	383,519
TOTAL	\$ 2,384,020	\$ 2,486,652	\$ 2,585,347	\$ 2,684,042	\$ 2,782,737	\$ 2,881,433

Composite Growth Rate	4.32%	4.30%	3.97%	3.82%	3.68%	3.55%
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City of Camas Sewer Utility Sewer Sales Revenue Growth by Customer Class

Customer Class	Cumulative Rate Increase Factors <i>pasted values</i> ----->					
Single Family Residential	107.24%	114.99%	114.99%	114.99%	114.99%	114.99%
Multi-Family Residential	107.24%	114.99%	114.99%	114.99%	114.99%	114.99%
Commercial & Industrial	102.00%	104.04%	104.04%	104.04%	104.04%	104.04%
Residential/Commercial	107.24%	114.99%	114.99%	114.99%	114.99%	114.99%
Wafertech Sewer	102.00%	104.04%	104.04%	104.04%	104.04%	104.04%

Customer Class	Rate Increases from PY	
Single Family Residential	107.24%	107.23%
Multi-Family Residential	107.24%	107.23%
Commercial & Industrial	102.00%	102.00%
Residential/Commercial	107.24%	107.23%
Wafertech Sewer	102.00%	102.00%

**below figures used as Sewage Sales input*

Revenue -- Accounts for 2003 and 2004 Adopted Rate Increases

Customer Classes	2003 Revenue Under Adopted Rates	2004 Revenue Under Adopted Rates	2005 Revenue Under Adopted Rates	2006 Revenue Under Adopted Rates	2007 Revenue Under Adopted Rates	2008 Revenue Under Adopted Rates
Single Family Residential	\$ 1,292,015	\$ 1,456,490	\$ 1,524,840	\$ 1,593,189	\$ 1,661,539	\$ 1,729,889
Multi-Family Residential	162,735	183,451	192,060	200,669	209,278	217,886
Commercial & Industrial	639,760	686,033	718,227	750,421	782,615	814,809
Residential/Commercial	17,895	20,173	21,119	22,066	23,013	23,959
Wafertech Sewer	391,189	399,013	399,013	399,013	399,013	399,013
TOTAL	\$ 2,503,594	\$ 2,745,160	\$ 2,855,259	\$ 2,965,358	\$ 3,075,458	\$ 3,185,557

Total linked to Sewage Sales Revenue on the O&M page

Cumulative Sewer Sales Increase	9.55%	9.65%	4.01%	3.86%	3.71%	3.58%
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City of Camas Sewer Utility Summary of Statistics by Customer Class

*** Exclusion of "Not Available - Bond" and "Commercial & Industrial - Flat" codes

INPUT FROM WATER CUSTOMER STATS
Input from Sewer Customer Stats

**10/26/03 NOTE: # of Bills NOT modified b/c not linked/otherwise used in model
NEW MODIFICATIONS BASED ON CUSTOMER STATS ADJUSTMENT

UNWEIGHTED

Residential Flow (AAF) 189.00 gpcd 92.23 ccf/mo
Multi-Family Multiplier 0.83 of SFR
Multi-Family Flow 156.87 gpcd OUTSIDE CITY MULTIPLIER: 1.00

Customer Class	INSIDE CITY				OUTSIDE CITY				TOTAL			
	# of Bills	# of Units	# of Accounts	Contributed Flow (ccf) [1]	# of Bills	# of Units	# of Accounts	Contributed Flow (ccf) [1]	# of Bills	# of Units	# of Accounts	Contributed Flow (ccf) [1]
Single Family Residential	26,358	4,354	4,393	401,552	2,337	386	390	35,599	28,695	4,740	4,783	437,151
Multi-Family Residential	845	621	140	47,536	12	4	2	306	857	625	142	47,842
Commercial & Industrial	1,354	197	205	282,836	18	3	3	1,726	1,372	200	208	284,562
Residential/Commercial	87	14	15	4,447	12	2	2	951	99	16	17	5,398
Wafertech Sewer	12	1	1	187,056	-	-	-	-	12	1	1	187,056
Totals	28,656	5,187	4,754	923,427	2,379	395	397	38,582	31,035	5,582	5,151	962,009

1.89 0.08 1.97

[1] gpcd x 365/748 x (billed units/12) for SFR & MFR; all others = total water usage.

Excluded Categories 67 12
Checked Total 28,723 5,187 4,766
5,231

0.38
1.59

WEIGHTED

OUTSIDE CITY MULTIPLIER: 1.50

Customer Class	INSIDE CITY				OUTSIDE CITY				TOTAL			
	# of Bills	# of Units	# of Accounts	Contributed Flow (ccf) [1]	# of Bills	# of Units	# of Accounts	Contributed Flow (ccf) [1]	# of Bills	# of Units	# of Accounts	Contributed Flow (ccf) [1]
Single Family Residential	26,358	4,354	4,393	401,552	3,506	579	585	53,399	29,864	4,933	4,978	454,951
Multi-Family Residential	845	621	140	47,536	18	6	3	459	863	627	143	47,995
Commercial & Industrial	1,354	197	205	282,836	27	5	5	2,589	1,381	202	210	285,425
Residential/Commercial	87	14	15	4,447	18	3	3	1,427	105	17	18	5,874
Wafertech Sewer	12	1	1	187,056	-	-	-	-	12	1	1	187,056
Totals	28,656	5,187	4,754	923,427	3,569	593	596	57,874	32,225	5,780	5,350	981,300



City of Camas Sewer Utility

Sample Bills (Monthly)

INSIDE CITY					
	Consumption	Current Rates (2003)	Adopted Rates (2004)	Proposed Rates (2004)	
				Across the Board	Cost of Service
Residential	0	\$ 20.75	\$ 22.25	\$ 21.73	\$ 22.60
Commercial/ Industrial	0	\$ 4.65	\$ 4.65	\$ 4.87	\$ 5.39
	50	109.65	112.15	114.81	119.53
	119.64	255.90	261.88	267.95	278.50
	200	424.65	434.65	444.65	461.94

Average



City of Camas Sewer Utility Fixed Asset Summary

Original Cost of Plant-in-Service

Function	PLANT-IN-SERVICE	TOTAL SEWER	UTILITY-BUILT PLANT	CONTRIBUTED PLANT
1	Collection Mains	\$ 8,661,892	\$ 7,282,952	\$ 1,378,941
2	Force Mains	1,628,204	29,720	1,598,484
3	Pumping	1,090,605	1,090,605	-
4	Treatment	19,756,670	19,534,905	221,765
5	Services	1,135,694	425,952	709,742
6	Manholes	376,044	-	376,044
9	General Plant	343,803	343,803	-
	Total	\$ 32,992,913	\$ 28,707,937	\$ 4,284,975
	<i>Contingency Reserve</i>	329,929	287,079	42,850

Annual Depreciation Expense (Year 2003)

Function	PLANT-IN-SERVICE	TOTAL SEWER	UTILITY-BUILT PLANT	CONTRIBUTED PLANT
1	Collection Mains	\$ 123,395	\$ 95,816	\$ 27,579
2	Force Mains	32,341	372	31,970
3	Pumping	37,831	37,831	-
4	Treatment	400,845	396,410	4,435
5	Services	19,519	5,324	14,195
6	Manholes	7,521	-	7,521
9	General Plant	31,065	31,065	-
		\$ 652,518	\$ 566,818	\$ 85,700

Accumulative Depreciation (Year 2003)

Function	PLANT-IN-SERVICE	TOTAL SEWER	UTILITY-BUILT PLANT	CONTRIBUTED PLANT
1	Collection Mains	\$ 1,709,308	\$ 1,464,839	\$ 244,469
2	Force Mains	245,133	11,517	233,617
3	Pumping	165,617	165,617	-
4	Treatment	2,043,418	2,012,587	30,831
5	Services	110,293	12,113	98,180
6	Manholes	84,021	-	84,021
9	General Plant	65,480	65,480	-
		\$ 4,423,269	\$ 3,732,152	\$ 691,117



**City of Camas
Sewer Utility
Growth Rates and Customer Projections**

Factor	Customer Class	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Population	13,448	14,261	15,074	15,887	16,699	17,512	18,325	19,137	19,950	20,763	21,576	22,388	23,201	24,014	24,826	25,639	
	Growth Rate		6.05%	5.70%	5.39%	5.11%	4.87%	4.64%	4.43%	4.25%	4.08%	3.92%	3.76%	3.63%	3.50%	3.38%	3.27%	
2	ADWF MGD Growth	1.16	1.24	1.32	1.41	1.50	1.60	1.71	1.82	1.94	2.07	2.21	2.36	2.52	2.68	2.85	3.05	
	Growth Rate		6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%	6.67%
	Water Contributed Flow		0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
3	Wafertech Accts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4	AAF MGD Growth		1.59	1.67	1.76	1.84	1.92	2.00	2.09	2.17	2.26	2.34	2.42	2.51	2.59	2.67	2.76	2.85
	Growth Rate			5.19%	5.13%	4.69%	4.48%	4.29%	4.11%	4.22%	3.94%	3.65%	3.52%	3.40%	3.29%	3.18%	3.29%	3.11%
5	Composite Growth Rate		1.97	2.05	2.14	2.22	2.30	2.39	2.47	2.56	2.64	2.73	2.81	2.89	2.97	3.05	3.14	3.23
				4.18%	6.10%	5.60%	5.30%	3.48%	3.36%	3.47%	3.27%	3.04%	2.95%	2.87%	2.79%	2.71%	2.82%	2.67%

Technical Appendix D
Sanitation Utility Spreadsheets



City of Camas Sanitation Utility Input of Data and Assumptions

Economic & Financial Factors		2002	2003	2004	2005	2006	2007	2008
1	General Cost Inflation	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
2	Labor Cost Inflation	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
3	Customer Growth	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
4	Construction Cost Inflation	0.00%	0.00%	4.00%	4.00%	4.00%	4.00%	4.00%
5	State Excise Tax	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%
6	State B&O Tax	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%	1.50%
7	State Recycling Tax	0.00%	0.48%	0.48%	0.48%	0.48%	0.48%	0.48%
8	Fund Earnings	2.00%	2.00%	2.00%	4.00%	4.00%	4.00%	4.00%
9	General Inflation plus Growth	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	Cumulative Customer Growth	2.00%	4.04%	6.12%	8.24%	10.41%	12.62%	14.87%

Accounting Assumptions		2002	2003	2004	2005	2006	2007	2008
422 SANITATION FUND								
	Beginning Operating Cash Balance		\$ 556,344					
FISCAL POLICY RESTRICTIONS								
	Minimum Working Capital (days of O&M expense)	60	60	60	60	60	60	60
	Minimum Capital Fund Balance - % of plant assets	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
REPLACEMENT FUNDING								
	<input type="checkbox"/> Do Not Fund Replacement Separate from CIP	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
RESERVE UTILIZATION								
	Use of Cash Reserves to Meet Annual Obligations	\$ -	\$ 135,479	\$ -	\$ -	\$ -	\$ -	\$ -
EXTERNAL FUNDING								
	Annual Amount of Interfund Assistance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Annual Repayment of Interfund Loans	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



City of Camas Sanitation Utility Input of Data and Assumptions

Capital Financing Assumptions	2002	2003	2004	2005	2006	2007	2008
GRANTS							
Proceeds Anticipated	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
REVENUE BONDS							
Term (years)	20	20	20	20	20	20	20
Interest Cost	5.00%	5.00%	5.00%	6.00%	6.00%	6.00%	6.00%
Issuance Cost	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
PWTF LOANS							
Term (years)	20	20	20	20	20	20	20
Interest Cost	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
OTHER LOANS							
Term (years)	20	20	20	20	20	20	20
Interest Cost	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%

Existing Debt Service - Revenue Bonds	2002	2003	2004	2005	2006	2007	2008
TOTAL REVENUE BONDS							
Annual Interest Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Principal Payment	-	-	-	-	-	-	-
Total Annual Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Existing Debt Service - PWTF Loans	2002	2003	2004	2005	2006	2007	2008
TOTAL PUBLIC WORKS TRUST FUND LOANS							
Annual Interest Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Principal Payment	-	-	-	-	-	-	-
Total Annual Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Existing Debt Service - Other Loans	2002	2003	2004	2005	2006	2007	2008
TOTAL OTHER LOANS							
Annual Interest Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Principal Payment	-	-	-	-	-	-	-
Total Annual Payment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



City of Camas Sanitation Utility Input of Data and Assumptions

422 Budget - Revenue	2002	2003	2004	2005	2006	2007	2008
REVENUES	<i>Actual</i>	<i>Budget</i>					
Garbage/Solid Waste Fees	\$ 1,125,509						
Recycling Revenues	163,221	154,500					
Miscellaneous Revenues	8,715	7,400					
[Other]	-	-					
TOTAL REVENUES	\$ 1,297,445	\$ 161,900	\$ -				

422 Budget - Expense	2002	2003	2004	2005	2006	2007	2008
SANITATION FUND	<i>Actual</i>	<i>6/03 Actual*2</i>					
500 DISPOSAL							
42 Disposal - Communication	\$ 10	\$ -					
47 Public Utility	413,346	420,000	433,000				
Total Disposal	\$ 413,356	\$ 420,000	\$ 433,000	\$ -	\$ -	\$ -	\$ -
600 RECYCLING							
31 Office and Operating Supplies	\$ -	\$ 11,955					
35 Small Tools and Minor Equipment	11,179	27,679					
41 Professional Services	163,070	169,200					
Total Recycling	\$ 174,249	\$ 208,834	\$ -	\$ -	\$ -	\$ -	\$ -
700 CUSTOMER ACCOUNTS							
31 Office and Operating Supplies	\$ 1,659	\$ 2,658					
41 Professional Services	10,724	6,001					
42 Communication	375	824					
92 Interfund Processing Services	82,867	85,632	21,620				
Total Customer Accounts	\$ 95,625	\$ 95,115	\$ 21,620	\$ -	\$ -	\$ -	\$ -
800 ADMINISTRATION/GENERAL							
11 Administration/General - Regular Salaries	\$ 27,516	\$ 8,749					
12 Overtime	-	-					
21 Personnel Benefits	6,793	1,966					
22 Uniforms & Clothing	-	1,579					
31 Office and Operating Supplies	6,307	3,809					
35 Small Tools and Minor Equipment	57	75					
41 Professional Services	414	-					
42 Communication	2,654	2,806					
43 Travel	(4)	-					
44 Advertising	-	-					
46 Insurance	2,933	3,490					
47 Disposal Fees	-	-					



City of Camas Sanitation Utility Input of Data and Assumptions

48	Repairs & Maintenance	473	-						
49	Miscellaneous	1,694	1,160						
53	External Taxes & Operational Assessments	61,964	63,277						
91	Interfund Processing Services	22,030	5,151	6,315					
91A	Customer Billing (IF Prof Svcs - Acctg)	-	17,636	-					
95	Interfund Operating Rentals & Leases	-	-						
98	Interfund Repairs & Maintenance	-	-						
	Total Administration/General	\$ 132,831	\$ 109,697	\$ 6,315	\$ -	\$ -	\$ -	\$ -	-
900 REFUSE COLLECTION									
11	Refuse Collection - Regular Salaries	\$ 153,269	\$ 155,785						
12	Overtime	22,585	27,433						
21	Personnel Benefits	47,529	52,954						
31	Office and Operating Supplies	19,488	13,528						
32	Fuel Consumed	310	101						
35	Small Tools and Minor Equipment	2,175	18,094						
42	Communication	778	746						
45	Rentals	-	1,055						
44	Advertising	73	-						
46	Insurance	-	-						
48	Repairs & Maintenance	366	-						
49	Miscellaneous	-	-						
95	Interfund Operating Rentals & Leases	216,363	200,299	255,000	255,000	310,000	310,000	310,000	310,000
98	Interfund Repairs & Maintenance	-	-						
	Total Refuse Collection	\$ 462,936	\$ 469,996	\$ 255,000	\$ 255,000	\$ 310,000	\$ 310,000	\$ 310,000	\$ 310,000
TOTAL SANITATION FUND BUDGET		\$ 1,278,997	\$ 1,303,642	\$ 715,935	\$ 255,000	\$ 310,000	\$ 310,000	\$ 310,000	\$ 310,000



City of Camas Sanitation Utility Capital Improvement Program

Cost in Year: 2003

Improvement Projects (Upgrades & Expansions)								TOTAL FORECASTED PROJECT COSTS								
Rank	Current Cost	Year	Description	Life in Years	% Upgrade	% Expansion	Specific Funding Source	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
1	\$ 200,000	2003	Automated Side Loader Truck	10	100%	0%	CALCULATED FUNDING	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 200,000
2	110,000	2005	Refuse Truck for Sanitary	10	100%	0%	CALCULATED FUNDING	-	-	-	118,976	-	-	-	-	118,976
3				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
4				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
5				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
6				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
7				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
8				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
9				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
10				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
11				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
12				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
13				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
14				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
15				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
16				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
17				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
18				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
19				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
20				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
21				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
22				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
23				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
24				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
25				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
26				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
27				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
28				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
29				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
30				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
Total Improvement Projects								\$ -	\$ 200,000	\$ -	\$ 118,976	\$ -	\$ -	\$ -	\$ -	\$ 318,976



City of Camas Sanitation Utility Capital Improvement Program

Repair and Replacement Projects*

TOTAL FORECASTED PROJECT COSTS

Rank	Current Cost	Year	Description	Life in Years	% Upgrade	% Expansion	Specific Funding Source	2002	2003	2004	2005	2006	2007	2008	2009	TOTAL
1				10	100%	0%	CALCULATED FUNDING	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
3				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
4				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
5				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
6				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
7				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
8				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
9				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
10				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
11				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
12				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
13				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
14				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
15				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
16				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
17				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
18				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
19				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
20				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
21				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
22				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
23				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
24				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
25				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
26				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
27				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
28				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
29				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
30				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
31				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
32				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
33				50	100%	0%	CALCULATED FUNDING	-	-	-	-	-	-	-	-	-
Total Repair & Replacement Projects								\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Capital Costs								\$ 310,000	\$ 200,000	\$ 118,976	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 318,976

* Replacement Trucks are assumed to be purchased by the ER&R Fund



City of Camas Sanitation Utility Operating Revenue and Expenditure Forecast

		<i>Actual</i>							
Revenues		FORECAST BASIS	2002	2003	2004	2005	2006	2007	2008
REVENUES									
Garbage/Solid Waste Fees	<i>Customer Growth</i>		\$ 1,125,509	\$ 1,148,020	\$ 1,170,980	\$ 1,194,399	\$ 1,218,287	\$ 1,242,653	\$ 1,267,506
Recycling Revenues	<i>General Cost Inflation</i>		163,221	154,500	159,135	163,909	168,826	173,891	179,108
Miscellaneous Revenues	<i>Customer Growth</i>		8,715	7,400	7,548	7,699	7,853	8,010	8,170
[Other]	<i>Customer Growth</i>		-	-	-	-	-	-	-
TOTAL REVENUE			\$ 1,297,445	\$ 1,309,920	\$ 1,337,663	\$ 1,366,008	\$ 1,394,967	\$ 1,424,554	\$ 1,454,784
Expenditures									
		FORECAST BASIS	2002	2003	2004	2005	2006	2007	2008
SANITATION FUND									
500 DISPOSAL									
42 Disposal - Communication	<i>General Inflation + Growth</i>		\$ 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
47 Public Utility	<i>General Inflation + Growth</i>		<u>413,346</u>	<u>420,000</u>	<u>433,000</u>	<u>454,650</u>	<u>477,383</u>	<u>501,252</u>	<u>526,314</u>
Total Disposal			\$ 413,356	\$ 420,000	\$ 433,000	\$ 454,650	\$ 477,383	\$ 501,252	\$ 526,314
600 RECYCLING									
31 Office and Operating Supplies	<i>General Inflation + Growth</i>		\$ -	\$ 11,955	\$ 12,552	\$ 13,180	\$ 13,839	\$ 14,531	\$ 15,258
35 Small Tools and Minor Equipment	<i>General Cost Inflation</i>		11,179	27,679	28,509	29,365	30,245	31,153	32,087
41 Professional Services	<i>General Cost Inflation</i>		<u>163,070</u>	<u>169,200</u>	<u>174,276</u>	<u>179,504</u>	<u>184,889</u>	<u>190,436</u>	<u>196,149</u>
Total Recycling			\$ 174,249	\$ 208,834	\$ 215,338	\$ 222,049	\$ 228,974	\$ 236,120	\$ 243,494
700 CUSTOMER ACCOUNTS									
31 Office and Operating Supplies	<i>General Inflation + Growth</i>		\$ 1,659	\$ 2,658	\$ 2,791	\$ 2,931	\$ 3,077	\$ 3,231	\$ 3,393
41 Professional Services	<i>General Cost Inflation</i>		10,724	6,001	6,181	6,366	6,557	6,754	6,957
42 Communication	<i>General Cost Inflation</i>		375	824	849	874	900	927	955
92 Interfund Processing Services	<i>General Inflation + Growth</i>		<u>82,867</u>	<u>85,632</u>	<u>21,620</u>	<u>22,701</u>	<u>23,836</u>	<u>25,028</u>	<u>26,279</u>
Total Customer Accounts			\$ 95,625	\$ 95,115	\$ 31,441	\$ 32,872	\$ 34,371	\$ 35,940	\$ 37,584
800 ADMINISTRATION/GENERAL									
11 Administration/General - Regular Salaries	<i>Labor Cost Inflation</i>		\$ 27,516	\$ 8,749	\$ 9,011	\$ 9,282	\$ 9,560	\$ 9,847	\$ 10,142
12 Overtime	<i>Labor Cost Inflation</i>		-	-	-	-	-	-	-
21 Personnel Benefits	<i>Labor Cost Inflation</i>		6,793	1,966	2,025	2,086	2,148	2,213	2,279
22 Uniforms & Clothing	<i>General Cost Inflation</i>		-	1,579	1,626	1,675	1,725	1,777	1,830
31 Office and Operating Supplies	<i>General Inflation + Growth</i>		6,307	3,809	3,999	4,199	4,409	4,630	4,861
35 Small Tools and Minor Equipment	<i>General Cost Inflation</i>		57	75	77	79	82	84	87
41 Professional Services	<i>General Cost Inflation</i>		414	-	-	-	-	-	-
42 Communication	<i>General Cost Inflation</i>		2,654	2,806	2,891	2,977	3,067	3,159	3,253
43 Travel	<i>General Cost Inflation</i>		(4)	-	-	-	-	-	-
44 Advertising	<i>General Cost Inflation</i>		-	-	-	-	-	-	-



City of Camas Sanitation Utility Operating Revenue and Expenditure Forecast

			<i>Actual</i>						
46	Insurance	<i>General Cost Inflation</i>	2,933	3,490	3,595	3,703	3,814	3,928	4,046
47	Disposal Fees	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	473	-	-	-	-	-	-
49	Miscellaneous	<i>General Cost Inflation</i>	1,694	1,160	1,195	1,230	1,267	1,305	1,344
53	External Taxes & Operational Assessments	<i>Excise, B&O, Recycl. Tax</i>	61,964	59,297	60,490	61,708	62,950	64,217	65,510
91	Interfund Processing Services	<i>General Cost Inflation</i>	22,030	5,151	6,315	6,504	6,700	6,901	7,108
91A	Customer Billing (IF Prof Svcs - Acctg)	<i>General Inflation + Growth</i>	-	17,636	-	-	-	-	-
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
98	Interfund Repairs & Maintenance	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
Total Administration/General			\$ 132,831	\$ 105,717	\$ 91,224	\$ 93,444	\$ 95,722	\$ 98,060	\$ 100,461
900 REFUSE COLLECTION									
11	Refuse Collection - Regular Salaries	<i>Labor Cost Inflation</i>	\$ 153,269	\$ 155,785	\$ 160,459	\$ 165,273	\$ 170,231	\$ 175,338	\$ 180,598
12	Overtime	<i>Labor Cost Inflation</i>	22,585	27,433	28,256	29,104	29,977	30,877	31,803
21	Personnel Benefits	<i>Labor Cost Inflation</i>	47,529	52,954	54,542	56,179	57,864	59,600	61,388
31	Office and Operating Supplies	<i>General Inflation + Growth</i>	19,488	13,528	14,204	14,914	15,660	16,443	17,265
32	Fuel Consumed	<i>General Cost Inflation</i>	310	101	104	107	111	114	117
35	Small Tools and Minor Equipment	<i>General Cost Inflation</i>	2,175	18,094	18,636	19,196	19,771	20,365	20,975
42	Communication	<i>General Cost Inflation</i>	778	746	768	791	815	839	865
45	Rentals	<i>General Cost Inflation</i>	-	1,055	1,087	1,120	1,153	1,188	1,224
44	Advertising	<i>General Cost Inflation</i>	73	-	-	-	-	-	-
46	Insurance	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
48	Repairs & Maintenance	<i>General Cost Inflation</i>	366	-	-	-	-	-	-
49	Miscellaneous	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
95	Interfund Operating Rentals & Leases	<i>General Cost Inflation</i>	216,363	200,299	255,000	255,000	310,000	310,000	310,000
98	Interfund Repairs & Maintenance	<i>General Cost Inflation</i>	-	-	-	-	-	-	-
Total Refuse Collection			\$ 462,936	\$ 469,996	\$ 533,058	\$ 541,683	\$ 605,582	\$ 614,763	\$ 624,235
TOTAL SANITATION FUND BUDGET			\$ 1,278,997	\$ 1,299,662	\$ 1,304,060	\$ 1,344,698	\$ 1,442,031	\$ 1,486,135	\$ 1,532,088
CASH OPERATING EXPENDITURES			\$ 1,278,997	\$ 1,299,662	\$ 1,304,060	\$ 1,344,698	\$ 1,442,031	\$ 1,486,135	\$ 1,532,088



City of Camas Sanitation Utility Revenue Requirements Analysis

Cash Flow Sufficiency Test	2002	2003	2004	2005	2006	2007	2008
EXPENSES							
Cash Operating Expenses	\$ 1,278,997	\$ 1,299,662	\$ 1,304,060	\$ 1,344,698	\$ 1,442,031	\$ 1,486,135	\$ 1,532,088
Rate Funded Capital Improvement Program	-	200,000	-	118,976	-	-	-
Additions Required to Meet Minimum Working Capital	-	-	-	-	-	-	-
Total Expenses	\$ 1,278,997	\$ 1,499,662	\$ 1,304,060	\$ 1,463,674	\$ 1,442,031	\$ 1,486,135	\$ 1,532,088
REVENUES							
Sanitation Billing	\$ 1,125,509	\$ 1,148,020	\$ 1,170,980	\$ 1,194,399	\$ 1,218,287	\$ 1,242,653	\$ 1,267,506
Recycling Revenue	163,221	154,500	159,135	163,909	168,826	173,891	179,108
Other Revenue	8,715	7,400	7,548	7,699	7,853	8,010	8,170
Operating Fund Interest Earnings	-	11,127	7,555	16,755	16,755	18,844	20,502
Interfund Resources	-	-	-	-	-	-	-
Use of Reserves	-	135,479	-	-	-	-	-
Total Revenue	\$ 1,297,445	\$ 1,456,525	\$ 1,345,217	\$ 1,382,763	\$ 1,411,722	\$ 1,443,399	\$ 1,475,286
CASH TEST REVENUE DEFICIENCY (SURPLUS)	\$ (18,448)	\$ 43,136	\$ (41,157)	\$ 80,911	\$ 30,309	\$ 42,737	\$ 56,801

Rate Increase Required	2002	2003	2004	2005	2006	2007	2008
Maximum Deficiency From Tests	\$ -	\$ 43,136	\$ -	\$ 80,911	\$ 30,309	\$ 42,737	\$ 56,801
Net Revenue From Prior Rate Increases	-	-	-	-	82,529	84,180	85,864
Revenue Deficiency	\$ -	\$ 43,136	\$ -	\$ 80,911	\$ -	\$ -	\$ -
Plus: Adjustment for State Excise Tax	-	1,611	-	3,022	-	-	-
Total Revenue Deficiency	\$ -	\$ 44,747	\$ -	\$ 83,933	\$ -	\$ -	\$ -
Rate Revenue Before Rate Increase (Incl. previous increases)	\$ 1,125,509	\$ 1,148,020	\$ 1,170,980	\$ 1,194,399	\$ 1,303,899	\$ 1,329,977	\$ 1,356,576
Required Annual Rate Increase	0.00%	3.90%	0.00%	7.03%	0.00%	0.00%	0.00%
Number of Months New Rates Will Be In Effect	12	12	12	12	12	12	12
<i>Info: Percentage Increase to Generate Required Revenue</i>	0.00%	3.90%	0.00%	7.03%	0.00%	0.00%	0.00%
Policy Induced Rate Increases		0.00%					
ANNUAL RATE INCREASE	0.00%	0.00%	0.00%	7.03%	0.00%	0.00%	0.00%
CUMULATIVE RATE INCREASE	0.00%	0.00%	0.00%	7.03%	7.03%	7.03%	7.03%
Full Year Rate Revenues After Rate Increase	\$ 1,125,509	\$ 1,148,020	\$ 1,170,980	\$ 1,278,332	\$ 1,303,899	\$ 1,329,977	\$ 1,356,576
Net Cash Flow After Rate Increase	18,448	(178,615)	41,157	(0)	52,220	41,443	29,062



City of Camas Sanitation Utility Revenue Requirements Analysis

	2002	2003	2004	2005	2006	2007	2008
Projected Rate Revenues w/o Any Rate Increase	\$ 1,125,509	\$ 1,148,020	\$ 1,170,980	\$ 1,194,399	\$ 1,218,287	\$ 1,242,653	\$ 1,267,506
Additional Revenues From 2002 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2003 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2004 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2005 Rate Increase	-	-	-	83,933	85,611	87,324	89,070
Additional Revenues From 2006 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2007 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2008 Rate Increase	-	-	-	-	-	-	-
Additional Revenues From 2009 Rate Increase	-	-	-	-	-	-	-
Total Additional Revenues From Rate Increases	\$ -	\$ -	\$ -	\$ 83,933	\$ 85,611	\$ 87,324	\$ 89,070
EFFECTIVE RATE REVENUES AFTER RATE INCREASE	\$ 1,125,509	\$ 1,148,020	\$ 1,170,980	\$ 1,278,332	\$ 1,303,899	\$ 1,329,977	\$ 1,356,576
<i>Adjustment for Partial Year Increase</i>	-	-	-	-	-	-	-
Additional State Excise Taxes							
Additional State Excise Taxes From 2002 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2003 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2004 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2005 Rate Increase	-	-	-	3,022	3,082	3,144	3,207
Additional State Excise Taxes From 2006 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2007 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2008 Rate Increase	-	-	-	-	-	-	-
Additional State Excise Taxes From 2009 Rate Increase	-	-	-	-	-	-	-
Total Additional State Excise taxes From Rate Increases	\$ -	\$ -	\$ -	\$ 3,022	\$ 3,082	\$ 3,144	\$ 3,207
Memorandum Items:							
Annual Growth Rate	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
State Excise Tax Rate	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%	3.60%

Fund Activity	2002	2003	2004	2005	2006	2007	2008
OPERATING FUND							
Beginning Balance	\$ -	\$ 556,344	\$ 377,729	\$ 418,886	\$ 418,886	\$ 471,106	\$ 512,550
plus: Net Cash Flow after Rate Increase	-	(178,615)	41,157	(0)	52,220	41,443	29,062
Ending Balance	\$ 556,344	\$ 377,729	\$ 418,886	\$ 418,886	\$ 471,106	\$ 512,550	\$ 541,612
<i>Minimum Working Capital</i>		213,643	214,366	221,046	237,046	244,296	251,850
<i>Info: No of Days of Cash Operating Expenses</i>		106	117	114	119	126	129



City of Camas Sanitation Utility

Summary of Revenue Requirements	2003	2004	2005	2006	2007	2008
SOURCES						
Rate Revenues Before Increase	\$ 1,148,020	\$ 1,170,980	\$ 1,194,399	\$ 1,218,287	\$ 1,242,653	\$ 1,267,506
Recycling Revenues	154,500	159,135	163,909	168,826	173,891	179,108
Operating Fund Interest Earnings	11,127	7,555	16,755	16,755	18,844	20,502
Other Revenues	7,400	7,548	7,699	7,853	8,010	8,170
Use of Reserves	<u>135,479</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
TOTAL SOURCES	\$ 1,456,525	\$ 1,345,217	\$ 1,382,763	\$ 1,411,722	\$ 1,443,399	\$ 1,475,286
USES						
<i>Disposal</i>	\$ 420,000	\$ 433,000	\$ 454,650	\$ 477,383	\$ 501,252	\$ 526,314
<i>Recycling</i>	208,834	215,338	222,049	228,974	236,120	243,494
<i>Customer Accounts</i>	95,115	31,441	32,872	34,371	35,940	37,584
<i>Administration/General</i>	105,717	91,224	93,444	95,722	98,060	100,461
<i>Refuse Collection</i>	<u>469,996</u>	<u>533,058</u>	<u>541,683</u>	<u>605,582</u>	<u>614,763</u>	<u>624,235</u>
Total Functional Uses	\$ 1,299,662	\$ 1,304,060	\$ 1,344,698	\$ 1,442,031	\$ 1,486,135	\$ 1,532,088
Rate-Funded Capital Improvement Program	\$ 200,000	\$ -	\$ 118,976	\$ -	\$ -	\$ -
Additions to Reserve	<u>\$ -</u>					
TOTAL USES	\$ 1,499,662	\$ 1,304,060	\$ 1,463,674	\$ 1,442,031	\$ 1,486,135	\$ 1,532,088
INCREASE CALCULATION						
Rate Revenue Including Previous Increases	\$ 1,148,020	\$ 1,170,980	\$ 1,194,399	\$ 1,303,899	\$ 1,329,977	\$ 1,356,576
Total Annual Revenue Deficiency*	<u>44,747</u>	<u>-</u>	<u>83,933</u>	<u>-</u>	<u>-</u>	<u>-</u>
RATE REVENUE AFTER INCREASES	\$ 1,192,767	\$ 1,170,980	\$ 1,278,332	\$ 1,303,899	\$ 1,329,977	\$ 1,356,576
<i>Annual Rate Increase</i>	0.00%	0.00%	7.03%	0.00%	0.00%	0.00%
<i>Cumulative Rate Increase</i>	0.00%	0.00%	7.03%	7.03%	7.03%	7.03%



City of Camas Sanitation Utility Functional Allocations

Allocation of Operating Expenses

Test Year =>	2004	FUNCTIONS OF SANITATION SERVICE			AS ALL OTHERS	TOTAL	ALLOCATION BASIS
OPERATING EXPENSE	TOTAL COSTS	CUSTOMER	DISPOSAL	COLLECTION			
DISPOSAL	433,000	0.00%	100.00%	0.00%	0.00%	100.00%	All to Disposal
RECYCLING	215,338	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
CUSTOMER	31,441	100.00%	0.00%	0.00%	0.00%	100.00%	All to Customer
COLLECTION	533,058	0.00%	0.00%	100.00%	0.00%	100.00%	All to Collection
ADMINISTRATION/GENERAL							
Customer Billing	-	100.00%	0.00%	0.00%	0.00%	100.00%	All to Customer
All Other	91,224	100.00%	0.00%	0.00%	0.00%	100.00%	As All Others
Total Operating Expenses	\$ 1,304,060	\$ 122,665	\$ 433,000	\$ 533,058	\$ 215,338	\$ 1,304,060	
Water Service Functions		11.27%	39.77%	48.96%		100.00%	
Allocation of "As All Others"		\$ 24,262	\$ 85,643	\$ 105,433	\$ (215,338)	\$ -	
TOTAL	\$ 1,304,060	\$ 146,927	\$ 518,643	\$ 638,491	\$ -	\$ 1,304,060	
Allocation Percentages	100.00%	11.27%	39.77%	48.96%	0.00%	100.00%	



City of Camas Sanitation Utility Functional Allocations

Allocation of Revenue Requirement

Design Rates For =>	2004	FUNCTIONS OF SANITATION SERVICE			AS ALL OTHERS	TOTAL	ALLOCATION BASIS
REVENUE REQUIREMENT	TOTAL COSTS	CUSTOMER	DISPOSAL	COLLECTION			
OPERATING AND CAPITAL EXPENSES							
Cash Operating Expenses	\$ 1,304,060	11.27%	39.77%	48.96%	0.00%	100.00%	As O&M Expense
Rate Funded Capital Improvement Program [Other]	-	0.00%	0.00%	100.00%	0.00%	100.00%	All to Collection
Total Expenses	1,304,060	11.27%	39.77%	48.96%	0.00%	100.00%	
OTHER REVENUES AND ADJUSTMENTS							
Less: Other Revenues	\$ (7,548)	11.27%	39.77%	48.96%	0.00%	100.00%	As O&M Expense
Less: Operating Fund Interest Earnings	(7,555)	11.27%	39.77%	48.96%	0.00%	100.00%	As O&M Expense
Less: Interfund Resources	-	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
Less: Recycling Revenue	(159,135)	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
Plus: Additional State Excise Tax	-	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
Plus: Net Cash Flow after Rate Increase	41,157	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
Plus: Adjustment for Partial Year Increase	-	0.00%	0.00%	0.00%	100.00%	100.00%	As All Others
Rate Revenue Requirement	\$ 1,170,980	\$ 145,225	\$ 512,636	\$ 631,096	\$ (117,978)	\$ 1,170,980	
Water Service Functions		11.27%	39.77%	48.96%		100.00%	
Allocation of "As All Others"		\$ (13,292)	\$ (46,921)	\$ (57,764)	\$ 117,978	\$ -	
Rate Revenue Requirement	\$ 1,170,980	\$ 131,933	\$ 465,715	\$ 573,332	\$ -	\$ 1,170,980	
Allocation Percentages	100.00%	11.27%	39.77%	48.96%	0.00%	100.00%	



City of Camas Sanitation Utility Unit Costs

Date: 12/12/2003
Filename: F:\Camas\Sanitation 10-28.xls\Unit Costs

Customer Costs

	Unit Cost
Percent to be Recovered:	100.00%
Allocated Revenue Requirements:	\$ 131,933
Charge Basis: <i>No. of Accounts*12</i>	63,459
Monthly Cost Per Bill:	\$ 2.08

Disposal Costs

	Unit Cost
Percent to be Recovered:	100.00%
Allocated Revenue Requirements:	\$ 465,715
Charge Basis: <i>Annual Weight Total (Weighted)</i>	14,925,267
Cost Per Pound:	\$ 0.0312

Collection Costs

	Unit Cost
Percent to be Recovered:	100.00%
Allocated Revenue Requirements:	\$ 573,332
Charge Basis: <i>Total Annual Time Spent Picking Up</i>	155,518
Cost Per Pickup:	\$ 3.69



City of Camas Sanitation Utility Sanitary Rates

Sanitation Rates

2004 ATB Required Rate Increase

0.00%

Regular Dumpsters

	# of Empties/ Week	Current Rates (2003)	Proposed Rates (2004)		Current vs. COS	
			Across the Board	Cost of Service	Difference (\$)	Difference (%)
1.5 Yard Dumpster	1	\$ 78.70	\$ 78.70	\$ 78.70	\$ -	0.00%
	2	143.05	143.05	149.66	6.61	4.62%
	3	207.40	207.40	223.45	16.05	7.74%
	4	271.75	271.75	297.24	25.49	9.38%
	5	336.10	336.10	371.02	34.92	10.39%

	# of Empties/ Week	Current Rates (2003)	Proposed Rates (2004)		Current vs. COS	
			Across the Board	Cost of Service	Difference (\$)	Difference (%)
2 Yard Dumpster	1	\$ 105.47	\$ 105.47	\$ 105.47	\$ -	0.00%
	2	194.74	194.74	194.74	-	0.00%
	3	284.01	284.01	284.01	-	0.00%
	4	373.28	373.28	373.28	-	0.00%
	5	462.55	462.55	462.55	-	0.00%

Regular Monthly Service

Customer Class	Current Rates (2003)	Proposed Rates (2004)		Current vs. COS	
		Across the Board	Cost of Service	Difference (\$)	Difference (%)
Minican (35 gal EOW)	\$ 9.25	\$ 9.25	\$ 9.25	\$ -	0.00%
1-35 gal Can	12.20	12.20	14.12	1.92	15.76%
1-65 gal Can	18.95	18.95	18.95	-	0.00%
1-95 gal Can	25.70	25.70	25.70	-	0.00%

Compacted Dumpsters

	# of Empties/ Week	Current Rates (2003)	Proposed Rates (2004)		Current vs. COS	
			Across the Board	Cost of Service	Difference (\$)	Difference (%)
1.5 Yard Dumpster	1	\$ 143.05	\$ 143.05	\$ 149.66	\$ 6.61	4.62%
	2	271.75	271.75	297.24	25.49	9.38%
	3	400.45	400.45	444.81	44.36	11.08%
	4	529.15	529.15	592.39	63.24	11.95%
	5	657.85	657.85	739.97	82.12	12.48%

	# of Empties/ Week	Current Rates (2003)	Proposed Rates (2004)		Current vs. COS	
			Across the Board	Cost of Service	Difference (\$)	Difference (%)
2 Yard Dumpster	1	\$ 194.74	\$ 194.74	\$ 194.74	\$ -	0.00%
	2	373.28	373.28	373.28	-	0.00%
	3	551.82	551.82	551.82	-	0.00%
	4	730.36	730.36	730.36	-	0.00%
	5	908.90	908.90	908.90	-	0.00%



**City of Camas
Sanitation Utility
Summary of Statistics by Customer Class - All Billing**

DUPLEXES: ACCT # X 2

Annual

Code	Description	# Bills	# Accounts	Weighting Factor	Container Size	# Containers	Weight by Container	Total Tons (Annual)
01	35 Gallon Weekly	17,600	2,933.3	1	1	2,933.3	30.0	528.0
02	65 Gallon Weekly	5,857	975.4	1	2	975.4	60.0	351.2
03	Duplex - 35 gal each - CAN 1	409	134.3	1	1	33.6	30.0	6.0
	Duplex - 35 gal each - CAN 2			1	1	33.6	30.0	6.0
04	95 Gallon Weekly	635	105.8	1	3	105.8	90.0	57.2
05	32 Gallon Carry-Out	874	145.7	1	1	145.7	30.0	26.2
06	Multi-Unit/Separate	164	27.3	1	1	120.3	30.0	21.6
07	Duplex/35-65 - CAN 1	54	18.0	1	1	9.0	30.0	1.6
	Duplex/35-65 - CAN 2			1	2	9.0	60.0	3.2
08	Duplex/65-65 - CAN 1	12	4.0	1	2	2.0	60.0	0.7
	Duplex/65-65 - CAN 2			1	2	2.0	60.0	0.7
09	32 Gallon EOW	172	28.7	1	1	28.7	30.0	5.2
19	2 Yard Compacted	6	1.0	1	6	1.0	800.0	4.8
21	1.5 Yd Empty	375	60.0	1	4	60.0	300.0	108.0
22	2 Yard Empty	472	89.0	1	5	89.0	400.0	213.6
24	1.5 Yard Owner Own	4	0.7	1	4	0.7	300.0	1.2
26	1.5 Yard Mo Rent (ON CALL)	440	72.8	1	4	72.8	-	-
27	2 Yard Mo Rent (ON CALL)	544	85.4	1	5	85.4	-	-
30	City Cans/Mail Rate	50	8.3	1	1	8.3	30.0	1.5
31	2-32 Gal Carry-Out	117	19.5	1	2	19.5	60.0	7.0
32	4-32 Gal Carry-Out	24	4.0	1	3	4.0	120.0	2.9
33	3-32 Gal Carry-Out	10	1.7	1	3	1.7	90.0	0.9
50	35 Gallon EOW	2,184	364.0	1	1	364.0	30.0	65.5
55	Duplex/35-35 EOW - CAN 1	12	4.0	1	1	2.0	30.0	0.4
	Duplex/35-35 EOW - CAN 2			1	1	2.0	30.0	0.4
Totals		30,015	5,082.9			5,108.7		1,413.9

2004 Priceout w/ growth

Container Sizes			
Type	Code	Average Weight (lbs)	Average Pickup Time
32 or 35 gallons	1	30.0	0.50
65 gallons	2	60.0	0.50
95 gallons	3	90.0	0.50
1.5 yards	4	300.0	2.08
2.0 yards	5	400.0	2.08
2.0 yard - compacted	6	800.0	2.08

minutes

# of Pickups/ Acc't	Annual Pickups	Average Monthly Pickups	Time/Pickup (minutes)	Annual Time Spent Picking Up
52	152,533	4.33	0.50	76,267
52	50,722	4.33	0.50	25,361
52	3,493	4.33	0.50	1,746
52	3,493	4.33	0.50	1,746
52	5,503	4.33	0.50	2,752
52	8,112	4.64	0.50	4,056
	1,443	4.40	0.50	722
52	468	4.33	0.50	234
52	468	4.33	0.50	234
52	104	4.33	0.50	52
52	104	4.33	0.50	52
26	745	2.17	0.50	373
	104	8.67	2.08	217
	4,619	6.42	2.08	9,623
52	9,393	8.79	2.08	19,569
52	35	4.33	2.08	72
	67	0.08	2.08	140
	60	0.06	2.08	125
52	1,411	14.11	0.50	706
52	936	4.00	0.50	468
52	208	4.33	0.50	104
52	104	5.20	0.50	52
26	9,464	2.17	0.50	4,732
52	104	4.33	0.50	52
26	52	2.17	0.50	26
253,745				149,479

Annual Weight (Weighted)
4,576,000
3,043,300
104,780
104,780
495,300
243,360
43,296
14,040
28,080
6,240
6,240
22,360
83,200
1,385,700
3,757,200
10,400
-
-
42,345
56,160
24,960
9,360
283,920
3,120
1,560
14,345,701

uses new unit costs, old customer stats

Priceout w/ # Accounts in 2002
497,131.5
212,790.6
22,766.4
28,239.5
26,180.6
4,693.1
3,488.7
872.6
2,786.8
3,419.8
80,210.9
191,598.9
607.4
2,329.6
-
2,591.8
4,131.0
3,964.2
1,262.0
525.3
35,385.3
533.4
1,125,509.3

\$ 1,170,980 2002 x 2 yrs growth

\$ - 2004 Rev Req -minus- inflated rev

32,760.62 Over (Under) 2002 Stats



**City of Camas
Sanitation Utility
Summary of Statistics by Customer Class - All Billing**

DUPLEXES: ACCT # X 2 Annual

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30	City Cans/Mail Rate	50	8.3	1	1	8.3	30.0	1.5
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33	3-32 Gal Carry-Out	10	1.7	1	3	1.7	90.0	0.9
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	Duplex/35-35 EOW - CAN 2			1	1	2.0	30.0	0.4
Totals		30,015	5,082.9			5,108.7		1,413.9

2004 Priceout w/ growth

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Type	Code	Average Weight (lbs)	Average Pickup Time minutes
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95 gallons	3	90.0	0.50
1.5 yards	4	300.0	2.08
2.0 yards	5	400.0	2.08
2.0 yard - compacted	6	800.0	2.08

Special Cases - Links
manual input from part's pickup data

# of Pickups/ Acc't	Annual Pickups	Average Monthly Pickups	Time/Pickup (minutes)	Annual Time Spent Picking Up
52	152,533	4.33	0.50	76,267
52	50,722	4.33	0.50	25,361
52	3,493	4.33	0.50	1,746
52	3,493	4.33	0.50	1,746
52	5,503	4.33	0.50	2,752
52	8,112	4.64	0.50	4,056
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52	104	4.33	0.50	52
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52	9,393	8.79	2.08	19,569
52	35	4.33	2.08	72
	67	0.08	2.08	140
	60	0.06	2.08	125
52	1,411	14.11	0.50	706
52	936	4.00	0.50	468
52	208	4.33	0.50	104
52	104	5.20	0.50	52
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26	52	2.17	0.50	26
Totals		253,745		149,479

Accts w/ multiple containers uses new unit costs, old customer stats

Annual Weight (Weighted)	Priceout w/ # Accounts in 2002
4,576,000	497,131.5
3,043,300	212,790.6
104,780	22,766.4
104,780	
495,300	28,239.5
243,360	26,180.6
43,296	4,693.1
14,040	3,488.7
28,080	
6,240	672.6
6,240	
22,360	2,786.8
83,200	3,419.8
1,385,700	80,210.9
3,757,200	191,598.9
10,400	607.4
-	2,329.6
-	2,591.8
42,345	4,131.0
56,160	3,964.2
24,960	1,262.0
9,360	625.3
283,920	35,385.3
3,120	533.4
1,560	
14,345,701	1,125,509.3

\$ 1,170,980 2002 x 2 yrs growth

\$ - 2004 Rev Req -minus- inflated rev

32,760.62 Over (Under) 2002 Stats



**City of Camas
Sanitation Utility
Growth**

Growth Rate:	2002	2003	2004	2005	2006	2007	2008	2009
	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%

NUMBER OF ACCOUNTS

Label	Container Size	Actual	Projected						
		2002	2003	2004	2005	2006	2007	2008	2009
1	35 Gallon	3,664	3,737	3,812	3,888	3,966	4,045	4,126	4,208
2	65 Gallon	999	1,019	1,039	1,060	1,081	1,103	1,125	1,147
3	95 Gallon	112	114	116	118	121	123	126	128
4	1.5 Yard	133	136	139	142	144	147	150	153
5	2 Yard	174	178	181	185	189	193	196	200
6	2 Yard - Compact	1	1	1	1	1	1	1	1
Total		5,083	5,185	5,288	5,394	5,502	5,612	5,724	5,839

NUMBER OF PICKUPS

Label	Container Size	Actual	Projected						
		2002	2003	2004	2005	2006	2007	2008	2009
1	35 Gallon	181,319	184,945	188,644	192,417	196,265	200,190	204,194	208,278
2	65 Gallon	52,334	53,380	54,448	55,537	56,648	57,781	58,936	60,115
3	95 Gallon	5,815	5,932	6,050	6,171	6,295	6,421	6,549	6,680
4	1.5 Yard	4,721	4,815	4,911	5,010	5,110	5,212	5,316	5,423
5	2 Yard	9,453	9,642	9,835	10,032	10,232	10,437	10,646	10,859
6	2 Yard - Compact	104	106	108	110	113	115	117	119
Total		253,745	258,820	263,997	269,277	274,662	280,155	285,758	291,474

ANNUAL TIME PICKING UP NOT USED ANYMORE

Label	Container Size	Actual	Projected						
		2002	2003	2004	2005	2006	2007	2008	2009
1	35 Gallon	90,659	92,473	94,322	96,208	98,133	100,095	102,097	104,139
2	65 Gallon	26,167	26,690	27,224	27,768	28,324	28,890	29,468	30,057
3	95 Gallon	2,908	2,966	3,025	3,086	3,147	3,210	3,275	3,340
4	1.5 Yard	9,835	10,031	10,232	10,437	10,645	10,858	11,075	11,297
5	2 Yard	19,694	20,088	20,489	20,899	21,317	21,743	22,178	22,622
6	2 Yard - Compact	217	221	225	230	235	239	244	249
Total		149,479	152,469	155,518	158,628	161,801	165,037	168,338	171,704

WEIGHTED WEIGHT IN TONS (ANNUAL)

Label	Container Size	Actual	Projected						
		2002	2003	2004	2005	2006	2007	2008	2009
1	35 Gallon	5,439,561	5,548,352	5,659,319	5,772,505	5,887,955	6,005,714	6,125,829	6,248,345
2	65 Gallon	3,140,020	3,202,820	3,266,877	3,332,214	3,398,859	3,466,836	3,536,173	3,606,896
3	95 Gallon	529,620	540,212	551,017	562,037	573,278	584,743	596,438	608,367
4	1.5 Yard	1,396,100	1,424,022	1,452,502	1,481,552	1,511,184	1,541,407	1,572,235	1,603,680
5	2 Yard	3,757,200	3,832,344	3,908,991	3,987,171	4,066,914	4,148,252	4,231,217	4,315,842
6	2 Yard - Compact	83,200	84,864	86,561	88,293	90,058	91,860	93,697	95,571
Total		14,345,701	14,632,615	14,925,267	15,223,772	15,528,248	15,838,813	16,155,589	16,478,701