ORDINANCE NO 1088

AN ORDINANCE OF THE CITY OF ROSLYN, WASHINGTON, AMENDING RMC 13.10.400; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE

WHEREAS, the City of Roslyn hired FCS Group to perform a sewer utility rate study; and

WHEREAS, that rate study was completed in early 2011 and the rates were adopted by Ordinance #1078; and

WHEREAS, staff has since identified an error in the reports that resulted in the wrong rate table being inserted in Ordinance #1079; and

WHEREAS, it is the desire of the City to ensure our code correctly identifies the rates as recommended by FCS Group, discussed by Council, and implemented by staff;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ROSLYN, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Roslyn Municipal Code 13.10.400 Amended.

13.10.400 Rates and charges.

The following rates and charges are hereby fixed for sewerage service inside and outside the city limits, and shall be paid therefor:

System Development Fee:	$2,000
Suncadia System Development Repayment Fee:	$3,900 (to be paid at the time application for sewer service is submitted)

A. Monthly Rates. The monthly sewer rates for sewer service provided by the city of Roslyn sewer system shall be as set out in the sewer rate table set out in this subsection and shall include the following two charges:

1. Monthly fixed charge per EDU; and

2. Monthly reserve charge per EDU.

Sewer Rate Table

Class	EDUs	2011	2012	2013	2014	2015	2016
Monthly Fixed Charge/Account							
Residential in-town	1	~~$ 45.49~~ $46.40	~~$ 47.49~~ $48.44	~~$ 49.58~~ $50.57	~~$ 51.07~~ $52.09	~~$ 52.60~~ $53.65	~~$ 54.18~~ $55.26
Residential out-of-town	1	~~$ 45.49~~ $46.40	~~$ 47.49~~ $48.44	~~$ 49.58~~ $50.57	~~$ 51.07~~ $52.09	~~$ 52.60~~ $53.65	~~$ 54.18~~ $55.26
Commercial in-town	1	~~53.33~~ $54.39	~~55.67~~ $56.79	~~58.12~~ $59.28	~~59.87~~ $61.06	~~61.66~~ $62.89	~~63.51~~ $64.78
Penn Place	30	~~1,248.38~~ $1,273.36	~~1,303.31~~ $1,329.38	~~1,360.66~~ $1,387.88	~~1,401.48~~ $1,429.51	~~1,443.52~~ $1,472.40	~~1,486.83~~ $1,516.57
Special rate[1]	1	~~22.16~~ $22.60	~~23.14~~ $23.60	~~24.16~~ $24.64	~~24.88~~ $25.37	~~25.63~~ $26.14	~~26.40~~ $26.92
Reserve Charge							
Per EDU/month		$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00

[1] Special rates pursuant to RCW 35.92.020(5) shall apply only for individuals receiving a property tax break for elderly, disabled, or reduced-income persons.

Rates will be in effect January 1st, and assessed beginning with the February 1st billing of each year, except for the 2011 rate, which shall be in effect July 1st, and assessed beginning on August 1, 2011, billing. Beginning January 1, 2017, rates shall increase by two percent per year, and will be assessed beginning with the February 1st billing of each year.

Section 3. Severability. Should any section, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this Ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or circumstances.

Section 4. Effective Date. This Ordinance shall be published in the official newspaper of the City, and shall take effect and be in full force five (5) days after the date of publication.

ADOPTED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON THE 28th DAY OF FEBRUARY, 2012.

CITY OF ROSLYN

Neal R. Lockett

Neal R. Lockett, Mayor

ATTEST/AUTHENTICATED:

Amber Shallow, Clerk-Treasurer

Approved as to form:

Margaret King, City Attorney

Filed with the City Clerk: February 23, 2012
Passed by the City Council: February 28, 2012
Date of Publication: March 5, 2012
Effective Date: March 5, 2012

FCS GROUP
Solutions Oriented Consulting

Memorandum

To: Amber Shallow **Date:** February 23, 2012

From: Sergey Tarasov S.T.

CC: Angie Sanchez Virnoche

RE Adjustment to the Water and Sewer Final Report

This memo is in response to the phone conversation on February 22, 2012 regarding Tables 4.3 and 4.4 in the City of Roslyn final report for Water and Wastewater Utility Rate Study. It was brought to our attention that Table 4.3 Existing Wastewater Rates and Table 4.4 Proposed Rates were using 2010 rates instead of 2011. After reviewing the study materials, we have confirmed that, in fact, 2010 rates were used.

The appropriate tables should be as follows:

Table 4.3: Existing Wastewater Rates

Class	EDUs	Existing
Monthly Fixed Charge / Account		
Residential in-town	1	$ 44.44
Residential out-of-town	1	44.44
Commercial In-town	1	52.10
Penn Place	30	1,219.69
Special Rate	1	21.65
Reserve Charge		
Per EDU / Month		$ 1.00

Table 4.4: Proposed Rates

Class	EDUs	2011	2012	2013	2014	2015	2016
Monthly Fixed Charge / Account							
Residential in-town	1	$ 46.40	$ 48.44	$ 50.57	$ 52.09	$ 53.65	$ 55.26
Residential out-of-town	1	46.40	48.44	50.57	52.09	53.65	55.26
Commercial In-town	1	54.39	56.79	59.28	61.06	62.89	64.78
Penn Place	30	1,273.36	1,329.38	1,387.88	1,429.51	1,472.40	1,516.57
Special Rate	1	22.60	23.60	24.64	25.37	26.14	26.92
Reserve Charge							
Per EDU / Month		$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00

[illegible] Town Center, [illegible] Ave NE [illegible] WA [illegible] ◆ [illegible]
[illegible] Street Suite [illegible], San Francisco, CA [illegible] ◆ [illegible]
[illegible] SW [illegible] Ave [illegible] OR [illegible] ◆ [illegible]

City of Roslyn

Final Report for

WATER AND WASTEWATER UTILITY RATE STUDY

August 2011

FCS GROUP
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T: 425.867.1802 | F: 425.867.1

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SECTION I: INTRODUCTION

A. INTRODUCTION

In September 2010, the City of Roslyn authorized FCS GROUP to complete a utility rate study for the water and wastewater utilities. The results of the study aim to establish a blueprint for achieving strong financial performance in the future and sustaining efficient and effective services to the City's customers. The scope of the project included the following elements:

- Assess revenue needs for a multi-year period that include adequate funding for operations and maintenance, capital projects, debt service, and other program activities.
- Project long-term capital needs and incorporate these needs into a long-term funding forecast that includes rates, debt, connection fees and existing reserves.
- Develop and recommend rate structures that:
  - Generate sufficient revenue to meet each utility's financial obligations on a standalone basis;
  - Promote water conservation;

The methodology, key factors, conclusions and recommendations for each of the key task areas of the study are summarized in this report.

SECTION II: RATE STUDY METHODOLOGY

A. UTILITY RATE SETTING PRINCIPALS AND METHODOLOGY

The methods used to establish utility rates are based on principles and practices that are generally accepted and widely followed throughout the utility industry. These principles are designed to produce rates that equitably recover costs from each class of customer by setting the appropriate level of revenue to be collected from rate payers, and establishing a rate structure to equitably collect those revenues.

The primary tasks of the rate study are listed below:

- Revenue Requirement Analysis – this analysis identified the total revenue requirement to fully fund each utility on a standalone basis, considering operating and maintenance expenditures, capital funding needs, debt requirements and policy objectives.
- Rate Design Analysis – this analysis includes the development of rates that generate sufficient revenue to meet each system's revenue requirement forecast and continue to address the City's pricing objectives (e.g. conservation).

B. REVENUE REQUIREMENT ANALYSIS

A revenue requirement analysis forms the basis for a long-range financial plan and multi-year rate management strategy. It also enables the City to set utility rate structures, which fully recover the total costs of operating each utility including: capital improvement and replacement, operations, maintenance, general administration, fiscal policy attainment, cash reserve management, and debt repayment. Linking utility rate levels to a financial plan such as this helps to enable not only sound financial performance for the City's utility enterprise funds, but also a clear and reasonable relationship between the costs imposed on utility customers and the costs incurred to provide them the service.

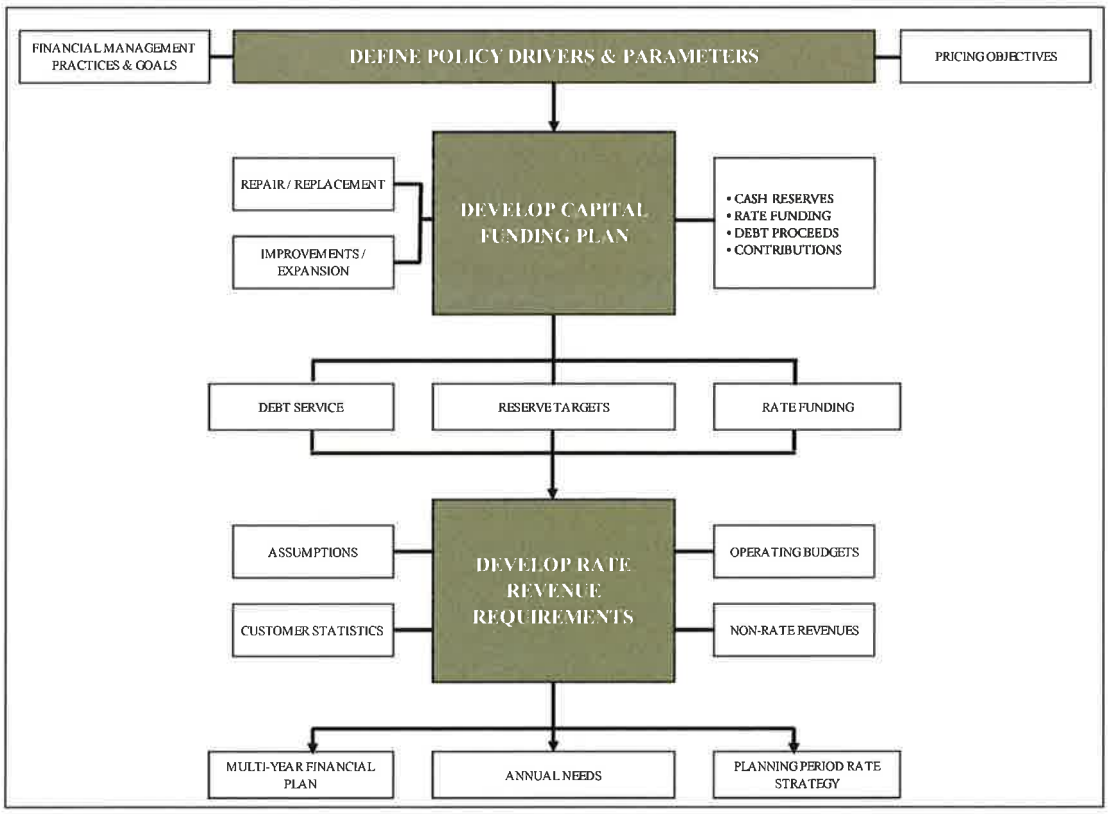
A revenue requirement analysis includes the following core elements to form a complete portrayal for the utility's financial obligations:

- **Fiscal Policy Analysis** – reviews fiscal policies of the City to comply with current policies or establish new policies.
- **Capital Funding Plan** – defines a strategy for funding the City's capital improvement program, including an analysis of available resources from rate revenues, debt financing, connection fees and any special resources that may be readily available (e.g., grants, developer participation, etc.).

- **Operating Forecast** – identifies future annual non-capital costs associated with the operation, maintenance, and administration of the utility system.
- **Reserve Analysis** – forecasts cash flow and fund balance activity in the City's utility reserves. Test for satisfaction of actual or recommended minimum fund balance policies, including working capital/operating reserves and capital contingency/emergency reserves.
- **Sufficiency Testing** – evaluates the sufficiency of utility revenues in meeting all obligations, including cash uses such as operating expenses, debt service, capital outlays, and reserve contributions, as well as any coverage requirements associated with long-term debt.
- **Strategy Development** – designs a forward-looking strategy for adjusting utility rates to fully fund all utility obligations on a periodic or annual basis over the projection period.

Table 2.1 illustrates the revenue requirement components.

Table 2.1: Revenue Requirement Analytical Components



C. RATE DESIGN

Rate design is focused on the development of pricing structures and is large dictated by the objectives of the utility. The principal consideration is for the rate structure to generate sufficient revenues for the system which are reasonably commensurate with the cost of providing service. Most rate designs consist of fixed and variable charges. Fixed costs typically attempt to cover costs of the system that do not vary with demands on the system while variable costs vary with a change in user demand. Although the majority of costs of operating a utility are fixed, in general customers prefer more cost tied to the variable charge since changes in behavior have a direct correlation with a change in their bill. The optimum rate structure is a balance of both fixed and variable charges tied to the unique revenue requirements of the City's water and wastewater utility systems.

SECTION III: WATER UTILITY

INTRODUCTION

The City of Roslyn is a rural community located in northwest Kittitas County, approximately 30 miles east of Snoqualmie Pass. Adjacent communities include Ronald, approximately two miles to the northwest, and Cle Elum and South Cle Elum, approximately three miles to the southeast. Roslyn is situated in small valley drained by Crystal Creek, a tributary of the Yakima River. The City obtains its drinking water supply from Domerie Creek, a tributary of the Cle Elum River, and has an agreement with Kittitas County Water District No. 2 to provide wholesale water to the community of Ronald.

The water utility currently serves 680 accounts from the Domerie Creek. Raw water is provided from a small impoundment located approximately five miles from each community prior to entering the filtration facilities. Water from the Domerie Creek intake is conveyed by gravity through approximately four miles of 12-inch steel transmission main and one mile of 16-inch ductile iron main to the water treatment plant. A footbridge supports a portion of the transmission main as it crosses the Cle Elum River. Most of the transmission main was installed in approximately 1910, with some portions installed in the 1920s. Approximately one mile of 16-inch ductile iron was installed in 1998. The City's slow sand filtration plant was completed in 1999. The water treatment plant filters and disinfects the raw water transferred from the impoundment on Domerie Creek. The treatment plant process includes roughing filters, slow sand filters, chlorination system, and clearwells. The treatment plant currently has two treatment trains, with a production capacity of 1.0 MGD. A third train can be added to increase the plant capacity to 1.5 MGD. The City has an in-ground concrete reservoir. The reservoir has a depth of 14.5 feet and a volume of approximately 800,000. The reservoir was originally constructed in the early 1920s and was relined in approximately 1939. The reservoir is located at 2,464 feet above sea level on top of a hill consisting of gravelly material.

A. REVENUE REQUIREMENT

A revenue requirement analysis forms the basis for a long-range financial plan and multi-year rate management strategy. The analysis is developed by completion of an operating forecast that identifies future annual operating costs and a capital funding plan that defines a strategy for funding the capital improvement needs of the City.

A.1 Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates and charges are sufficient to recover the costs the City incurs to operate and maintain the water system. A combination of 2010 budget revenues and expenses and 2009 and 2010 actual customer statistics data formed the baseline for the forecast. The operating income forecast was developed for the 2011

through 2016 time period. The following list highlights some of the key assumptions used in the development of the water utility revenue requirement:

Reserves

- Operating Reserve: minimum 90 days of O&M expenses (per discussion with City staff);
- Capital Contingency Reserve: $300,000 (per discussion with City staff);

Operating Revenue

- Retail Rate Revenue: based on 2009 and 2010 actual detailed customer statistics information;
- Customer Growth Rate Revenue: 0.0 percent (per discussion with City staff);
- Interest Earnings Rate: 0.9% per year (per discussion with City staff);

Operating & Maintenance (O&M) Expenses/Capital

- General Cost Inflation: 3.0 percent per year (per discussion with City staff);
- Construction Cost Inflation: 4.0 percent per year (per discussion with City staff);
- Labor Cost Inflation: 3.0 percent per year (per discussion with City staff);
- Medical: 10.0 percent per year (per discussion with City staff);
- Furlough Days: the 2010 budget was based on the inclusion of furlough days, reducing the labor and benefits expenses for 2010. For 2011 and thereafter, it was assumed that the labor and benefits expenses were back to regular, non furlough, levels. The adjustment to the 2010 budget was made based on information provided by the City for labor allocation by utility plus annual inflation escalation.

Debt Service

- Two (2) existing United Sates Department of Agriculture (USDA) Rural Development loan obligations totaling $118,000 per year.
- Two (2) new debt service obligations totaling $24,000 to $165,000 per year. The first debt issue is anticipated in 2012 for proceeds in the amount of $340,000, the second in 2014 for $2,000,000. Both issues are assumed to be revenue bonds with a 30-year term, a 5.0 percent interest rate and a 1.5 issuance cost. The debt issues will help fund the Replace Bridge Crossing and Domerie Intake to Bridge projects.

System Reinvestment

- System reinvestment funding is to ensure system integrity through reinvestment in the system. Ideally, the minimum funding would be an amount equal to or greater than depreciation expense.
- Historically, this rate funded component was funded through a separate rate of $1.00 per equivalent dwelling unit (EDU), which totaled approximately $10,700 in 2010 for the water utility.
- This study assumes the $1.00 per EDU charge would increase to $2.0 per ERU increasing to $21,300 per year.
- This level of system reinvestment may not be sufficient for the City's needs in the future. The City should review its existing replacement needs and target an annual funding level to meet a target level funding from rates rather than heavily relying on debt funding for these needs.

A.2 Capital Funding Plan

The water utility is anticipating $2,324,000 in capital costs in 2011 through 2016 (figures are escalated). Approximately $1,900,000 are related to the Domerie Intake to Bridge project, with the remaining capital related to Replace Bridge Crossing along with various ongoing replacement capital, including meter replacement and software. The annual average capital funding need is approximately $387,000, or $33,000 not including the Domerie Intake to Bridge project; 2014 is the highest capital funding year at $1,887,000. Funding for the capital projects identified includes: fund balances, rate funding, interest earnings and new debt. **Table 3.1** provides a summary of the capital funding program.

Table 3.1: Capital Funding Summary

Summary of Capital Expenditures	2011	2012	2013	2014	2015	2016	Total
CAPITAL PROJECTS	**$ 14,269**	**$ 381,502**	**$ 14,308**	**$ 1,886,654**	**$ 15,476**	**$ 12,653**	**$ 2,324,862**
FUNDING SOURCES							
Reserve Charge Funding	$ 14,269	$ 21,341	$ 14,308	$ -	$ 15,476	$ 12,653	$ 78,047
New Debt Proceeds	-	340,000	-	1,886,654	-	-	2,226,654
Capital Fund Balance	-	20,161	-	-	-	-	20,161
TOTAL CAPITAL RESOURCES	**$ 14,269**	**$ 381,502**	**$ 14,308**	**$ 1,886,654**	**$ 15,476**	**$ 12,653**	**$ 2,324,862**

Approximately 95.8 percent of capital will be funded through new debt issues and the remaining 4.2 percent will be funded through a combination of the reserve charge and existing capital fund balances.

A.3 Summary of Revenue Requirement

The operating forecast components of O&M expenses and debt service come together to form the multi-year revenue requirement. The revenue requirement compares the overall water utility revenue to the expenses to evaluate the sufficiency of rates. **Table 3.2** provides a summary of the water utility revenue requirement findings.

Table 3.2: Water Utility Revenue Requirement Summary

Revenue Requirement	2011	2012	2013	2014	2015	2016
Revenues						
Rate Revenues Under Existing Rates	$ 297,041	$ 297,041	$ 297,041	$ 297,041	$ 297,041	$ 297,041
Non-Rate Revenue	3,897	3,818	4,324	4,642	6,004	13,705
Total Revenue	**$ 300,938**	**$ 300,858**	**$ 301,364**	**$ 301,683**	**$ 303,044**	**$ 310,746**
Expenses						
Cash O&M Expenses	$ 223,579	$ 231,177	$ 239,142	$ 247,489	$ 256,271	$ 265,590
Existing Debt Service	117,592	117,592	117,592	117,592	117,592	117,592
New Debt Service	-	24,042	24,042	165,466	165,466	165,466
Total Expenses	**$ 341,171**	**$ 372,811**	**$ 380,776**	**$ 530,547**	**$ 539,330**	**$ 548,649**
Surplus (Deficiency)	**$ (40,233)**	**$ (71,953)**	**$ (79,412)**	**$ (228,864)**	**$ (236,286)**	**$ (237,903)**
% of Rate Revenue	13.54%	24.22%	26.73%	77.05%	79.55%	80.09%
Annual Rate Adjustment	**16.40%**	**16.40%**	**16.40%**	**16.40%**	**3.00%**	**3.00%**
Rate Revenues After Rate Increase	$ 321,398	$ 397,734	$ 462,962	$ 538,888	$ 560,286	$ 577,094
Net Cash Flow After Rate Increase	**$ (17,100)**	**$ 23,676**	**$ 78,165**	**$ 820**	**$ 13,721**	**$ 28,067**
Coverage After Rate Increase	n/a	6.91	9.17	1.72	1.81	1.93

Note: 2011 increase is assumed to be a partial year increase effective starting July 1.

Summary of Revenue Requirements:

- The revenue requirement analysis indicates a rate deficiency in each year beginning in 2011 ranging from $40,000 to $238,000.
- In order to fund the upcoming capital projects and to meet annual operating and maintenance requirements an increase of 16.4 percent in 2011, 2012, 2013 and 2014 is recommended, followed by a 3.0 percent increase in 2015 and 2016. The 2011 rate increase implementation is proposed to be in July instead of the typical February implementation. It is assumed that starting 2012 rate increase implementation will be in February of each year.
- Operating fund target of 90 days is built up over time starting at 14 days in 2011, increasing to 51 days in 2012 and finally reaching 90 days by 2013. Additional increases are required to achieve the 90 day target in 2011; therefore, a phased in approached is recommended.
- Emergency construction fund of $300,000 is built up over time and is met by 2016.
- The financial forecast assumes the use of revenue bonds for debt proceeds. The debt service coverage ratio is above the minimum target of 1.25 in every year, after the proposed rate increases are implemented.

B. RATE DESIGN

The principal objective of the rate design stage of this rate study is to implement water rate structures that collect the appropriate level of revenue.

Establishing rates is a blend of "Art" and "Science" and especially so when it comes to the rate levels and structures. Several variables must be balanced to arrive at optimal rates. The results of the revenues requirement analysis were used to develop new water rate structure alternatives to equitably recover the projected revenue requirement from customers.

B.1 Existing Water Rates

The existing water rates are composed of a fixed monthly charge and a variable charge per 100 cubic feet (cf) of use. The fixed monthly charge provides for 1,000 cf per equivalent dwelling unit (EDU), while the variable charge is applied towards all usage above 1,000 cf per EDU per month. In addition to the monthly fixed and variable charges, there is a $1.00 capital reserve charge per EDU. The fixed monthly charge is different for every class of service, while the variable charge per cf is $0.30 for all classes. **Table 3.3** provides a summary of the current water utility rate structure.

Table 3.3: Existing Water Rates

Class	EDUs	Existing
Monthly Fixed Charge / Account		
Residential in-town	1	$ 29.22
Residential out-of-town	1	44.12
Commercial In-town	1	31.39
Commercial out-of-town	1	48.44
School District K-8	33	928.72
School District High School	26	731.73
Penn Place	30	876.76
Water District No. 2 Ronald	109	766.90
Special Rate	1	21.65
Volume Rate (use over 1,000 cf per EDU)		
Annual		$ 0.30
Reserve Charge		
Per EDU / Month		$ 1.00

B.2 Proposed Water Rates

Multiple rate options were developed for the water utility. Alternative rate structures developed were:

- Equal increases in both fixed and variable components of the rate;
- No allowance, weighted adjustments to the fixed and variable rates;
- Partial allowance, weighted adjustments to the fixed and variable rates;
- Seasonal rate structure for the variable rate; and
- Tiered block structure for the residential classes.

Each of the rate structures developed generate the estimated 16.4 percent increase in revenue to meet the revenue requirement.

The City Council approved the seasonal rate structure for the variable rate. In addition, the reserve charge was increased to $2.0 per month per EDU. Under the new seasonal structure, all usage above the 1,000 cf included in the monthly fixed rate will be charged a different rate per 100 cf during the winter month of November through April and the summer month of May through October. The differential is representative of the additional demands on the water system during the summer months. **Table 3.4** provides a summary of the proposed rates.

Table 3.4: Proposed Water Rates

Class	EDUs	2011	2012	2013	2014	2015	2016
Monthly Fixed Charge / Account							
Residential in-town	1	$ 34.01	$ 39.59	$ 46.08	$ 53.64	$ 55.25	$ 56.91
Residential out-of-town	1	51.36	59.78	69.58	80.99	83.42	85.93
Commercial In-town	1	36.54	42.53	49.51	57.62	59.35	61.13
Commercial out-of-town	1	56.38	65.63	76.39	88.92	91.59	94.34
School District K-8	33	1,081.03	1,258.32	1,464.68	1,704.89	1,756.04	1,808.72
School District High School	26	851.73	991.42	1,154.01	1,343.27	1,383.57	1,425.07
Penn Place	30	1,020.55	1,187.92	1,382.74	1,609.51	1,657.79	1,707.53
Water District No. 2 Ronald	109	892.67	1,039.07	1,209.48	1,407.83	1,450.07	1,493.57
Special Rate	1	25.20	29.33	34.14	39.74	40.94	42.16
Volume Rate (use over 1,000 cf per EDU)							
Winter		$ 0.18	$ 0.21	$ 0.25	$ 0.29	$ 0.30	$ 0.31
Summer		0.39	0.45	0.53	0.61	0.63	0.65
Reserve Charge							
Per EDU / Month		$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00

C. SUMMARY

The analysis described above concludes the rate study for the water utility. After performing a rate revenue analysis, it was shown that the revenues at current level are not sufficient to fund ongoing water system obligations. As a result a 16.4 percent increase is proposed in 2011, 2012, 2013 and 2014 followed by a 3.0 percent increase in 2015 and 2016. The 2011 increase is proposed for a July implementation, while the remaining increases are based on February implementation.

In order to collect the revenue requirement the City's existing rates were adjusted by incorporating a seasonal rate structure. Under a seasonal rate structure, the variable rate is different for the winter months and the summer months. The differential represents the additional demand on the water system during the summer time period.

We recommend that the City revisit the study findings in two to three years to check that the assumptions used are still appropriate and no significant changes have occurred that would alter the results of the study. The City should use the study findings as a living document, continuously referencing the study outcomes to annul revenues and expenses.

The detailed technical exhibits developed as part of the water rate study can be found at the end of this report in the Technical Appendices.

SECTION III: WASTEWATER UTILITY

INTRODUCTION

The City of Roslyn owns and operates a wastewater collection system that currently serves residential and commercial customers in Roslyn and outside the City limits. Roslyn's collection system also conveys wastewater from Kittitas County Water District #2 (Ronald). There are 13.31 miles of pipe in the City's collection system. The City also maintains a 5 acre storm water attenuation pond (I&I pond) at the City's former treatment facility. At this site the City maintains a flow monitoring system and automated gate valve that can divert excess storm water flows into the I&I lagoon. From this facility wastewater is conveyed through 1.47 mile Coal Mines Interceptor to Cle Elum's 2nd Street Interceptor.

A. REVENUE REQUIREMENT

Similar to the water utility a revenue requirement was completed for the wastewater utility and forms the basis for a long-range financial plan and multi-year rate management strategy.

A.1 Operating Forecast

The purpose of the operating forecast is to determine whether the existing rates and charges are sufficient to recover the costs the City incurs to operate and maintain the wastewater system. A combination of 2010 budget revenues and expenses and 2009 and 2010 actual customer statistics data formed the baseline for the forecast. The operating income forecast was developed for the 2011 through 2016 time period. The following list highlights some of the key assumptions used in the development of the wastewater utility revenue requirement:

Reserves

- Operating Reserve: minimum 60 days of O&M expenses (per discussion with City staff);
- Capital Contingency Reserve: $200,000 (per discussion with City staff);

Operating Revenue

- Retail Rate Revenue: based on 2009 and 2010 actual detailed customer statistics information;
- Customer Growth Rate Revenue: 0.0 percent (per discussion with City staff);
- Interest Earnings Rate: 0.9% per year (per discussion with City staff);

Operating & Maintenance (O&M) Expenses/Capital

- General Cost Inflation: 3.0 percent per year (per discussion with City staff);
- Construction Cost Inflation: 4.0 percent per year (per discussion with City staff);
- Labor Cost Inflation: 3.0 percent per year (per discussion with City staff);
- Medical: 10.0 percent per year (per discussion with City staff);

- Furlough Days: the 2010 budget was based on the inclusion of furlough days, reducing the labor and benefits expenses for 2010. For 2011 and thereafter it was assumed that the labor and benefits expenses were back to regular, non furlough, levels. The adjustment to the 2010 budget was made based on information provided by the City for labor allocation by utility plus annual inflation escalation.

Debt Service

- Four (4) existing debt service obligations totaling approximately $97,000 in 2011 reducing to $56,000 by 2016; one revenue bond loan, one public works trust fund loan (PWTF) and two (2) United Sates Department of Agriculture (USDA) Rural Development loan obligations.
- One (1) new debt service obligation totaling $32,00 per year. The debt issue is anticipated in 2013 for proceeds in the amount of $450,000. The debt issue is assumed to be revenue bond with a 30-year term, a 5.0 percent interest rate and a 1.5 issuance cost. The debt issue will help fund the Montana Avenue, Third Street Rehab and Oregon Avenue & 2nd Street Alley projects.

System Reinvestment

- System reinvestment funding is to ensure system integrity through reinvestment in the system. Ideally, the minimum funding would be an amount equal to or greater than depreciation expense.
- Historically, this rate component was funded through a separate rate of $1.0 per equivalent dwelling unit (EDU), which totaled approximately $7,900 in 2010 for the wastewater utility.
- This study assumes the $1.00 per EDU charge will not change, generating $7,900 per year.

A.2 Capital Funding Plan

The wastewater utility is anticipating $857,000 in capital costs in 2011 through 2016 (figures are escalated). Approximately $842,000 are related to the Montana Avenue, Third Street Rehab and Oregon Avenue & 2nd Street Ally projects, with the remaining capital related to software. The annual average capital funding need is approximately $143,000, with 2013 being the highest capital funding year at $751,000. Funding for the capital projects identified includes: fund balances, rate funding, interest earnings and new debt. **Table 4.1** provides a summary of the capital funding program.

Table 4.1: Capital Funding Summary

Summary of Capital Expenditures	2011	2012	2013	2014	2015	2016	Total
CAPITAL PROJECTS	**$ 96,429**	**$ 2,942**	**$ 751,094**	**$ 3,182**	**$ 3,309**	**$ -**	**$ 856,956**
FUNDING SOURCES							
Reserve Charge Funding	$ 6,429	$ 2,942	$ 7,946	$ 3,182	$ 3,309	$ -	$ 23,808
Grants/ Developer Donations	90,000	-	-	-	-	-	90,000
New Debt Proceeds	-	-	450,000	-	-	-	450,000
Capital Fund Balance	-	-	293,149	-	-	-	293,149
TOTAL CAPITAL RESOURCES	**$ 96,429**	**$ 2,942**	**$ 751,094**	**$ 3,182**	**$ 3,309**	**$ -**	**$ 856,956**

Approximately 52.5 percent of capital will be funded through the new debt issue, 10.5 percent through a grant towards the Montana Avenue project and the remaining 37.0 percent will be funded through a combination of the reserve charge and existing capital fund balances.

A.3 Summary of Revenue Requirement

The operating forecast components of O&M expenses and debt service come together to form the multi-year revenue requirement. The revenue requirement compares the overall wastewater utility

revenue to the expenses to evaluate the sufficiency of rates. **Table 4.2** provides a summary of the wastewater utility revenue requirement findings.

Table 4.2: Wastewater Utility Revenue Requirement Summary

Revenue Requirement	2011	2012	2013	2014	2015	2016
Revenues						
Rate Revenues Under Existing Rates	$ 346,787	$ 346,787	$ 346,787	$ 346,787	$ 346,787	$ 346,787
Non-Rate Revenue	26,070	23,283	23,277	23,569	23,591	23,224
Total Revenue	**$ 372,857**	**$ 370,069**	**$ 370,064**	**$ 370,356**	**$ 370,377**	**$ 370,010**
Expenses						
Cash O&M Expenses	$ 284,553	$ 280,709	$ 289,737	$ 299,146	$ 308,986	$ 319,243
Existing Debt Service	96,834	94,673	92,494	90,314	55,735	55,655
New Debt Service	-	-	31,820	31,820	31,820	31,820
Total Expenses	**$ 381,386**	**$ 375,381**	**$ 414,051**	**$ 421,281**	**$ 396,542**	**$ 406,718**
Surplus (Deficiency)	**$ (8,529)**	**$ (5,312)**	**$ (43,987)**	**$ (50,925)**	**$ (26,164)**	**$ (36,708)**
% of Rate Revenue	2.46%	1.53%	12.68%	14.68%	7.54%	10.59%
Additions to Meet Coverage	$ -	$ -	$ -	$ -	$ (4,190)	$ -
Total Surplus (Deficiency)	**$ (8,529)**	**$ (5,312)**	**$ (43,987)**	**$ (50,925)**	**$ (30,354)**	**$ (36,708)**
% of Rate Revenue	2.46%	1.53%	12.68%	14.68%	8.75%	10.59%
Annual Rate Adjustment	**4.40%**	**4.40%**	**4.40%**	**3.00%**	**3.00%**	**3.00%**
Rate Revenues After Rate Increase	$ 354,416	$ 376,648	$ 393,220	$ 405,458	$ 417,622	$ 430,150
Net Cash Flow After Rate Increase	**$ (1,194)**	**$ 23,399**	**$ 658**	**$ 5,486**	**$ 41,942**	**$ 43,444**
Coverage After Rate Increase	2.36	3.14	1.88	1.94	1.76	4.16

Note: 2011 increase is assumed to be a partial year increase effective starting July 1.

Summary of Revenue Requirements:

- The revenue requirement analysis indicates a rate deficiency in each year beginning in 2011 ranging from a low of $8,500 to a high of $51,000.
- In order to fund the upcoming capital projects and to meet annual operating and maintenance requirements an increase of 4.4 percent in 2011, 2012 and 2013 is recommended, followed by a 3.0 percent increase in 2014, 2015 and 2016. The 2011 rate increase implementation is proposed to be in July instead of the typical February implementation. Rate increase implementation will go back to February implementation starting in 2012.
- Operating fund target is at or near 60 days in every year.
- Emergency construction fund of $200,000 is met through 2012, before it dips to $106,000 in 2013 due to the large capital costs in that year. The fund rebuilds to $200,000 by 2016.
- The debt service coverage ratio is well above the minimum target of 1.25 after the proposed rate increases.

B. RATE DESIGN

The principal objective of the rate design stage of this rate study was to implement wastewater rate structures that collect the appropriate level of revenue.

The results of the revenues requirement analysis were used to develop new wastewater rate structure alternatives to equitably recover the projected revenue requirement from customers.

B.1 Existing Wastewater Rates

The existing wastewater rates are composed of a fixed monthly charge. In addition to the monthly fixed charge, there is a $1.00 capital reserve charge per EDU. The fixed monthly charge is different for every class of service. **Table 4.3** provides a summary of the current wastewater utility rate structure.

Table 4.3: Existing Wastewater Rates

Class	EDUs	Existing
Monthly Fixed Charge / Account		
Residential in-town	1	$ 44.44
Residential out-of-town	1	44.44
Commercial In-town	1	52.10
Penn Place	30	1,219.69
Special Rate	1	21.65
Reserve Charge		
Per EDU / Month		$ 1.00

B.2 Proposed Wastewater Rates

The proposed wastewater rate schedule contains no structural changes and applies the rate increase to the fixed charge. **Table 4.4** provides a summary of the proposed rates.

Table 4.4: Proposed Rates

Class	EDUs	2011	2012	2013	2014	2015	2016
Monthly Fixed Charge / Account							
Residential in-town	1	$ 46.40	$ 48.44	$ 50.57	$ 52.09	$ 53.65	$ 55.26
Residential out-of-town	1	46.40	48.44	50.57	52.09	53.65	55.26
Commercial In-town	1	54.39	56.79	59.28	61.06	62.89	64.78
Penn Place	30	1,273.36	1,329.38	1,387.88	1,429.51	1,472.40	1,516.57
Special Rate	1	22.60	23.60	24.64	25.37	26.14	26.92
Reserve Charge							
Per EDU / Month		$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00	$ 1.00

C. SUMMARY

The analysis described above concludes the rate study for the wastewater utility. After performing a rate revenue analysis, it was shown that the revenues at current level are not sufficient to fund ongoing wastewater system obligations. As a result a 4.4 percent increase is proposed in 2011, 2012, and 2013 followed by a 3.0 percent increase in 2014, 2015 and 2016. The 2011 increase is proposed for a July implementation, while the remaining increases are based on February implementations.

We recommend that the City revisit the study findings in two to three years to check that the assumptions used are still appropriate and no significant changes have occurred that would alter the results of the study. The City should use the study findings as a living document, continuously referencing the study outcomes to annul revenues and expenses.

The detailed technical exhibits developed as part of the wastewater rate study can be found at the end of this report in the Technical Appendices.

TECHNICAL APPENDIX: WATER

TECHNICAL APPENDIX: WASTEWATER