

Section 10

Financial Plan

10.1 Introduction

This chapter has been prepared by FCS Group to provide a financial program that identifies for the City of Yelm (City) the revenue required for the sewer utility to remain financially viable, and to provide stable revenue for execution of the Capital Improvement Program (CIP) identified in the General Sewer Plan (GSP). This financial viability analysis considers the historical financial condition of the sewer utility, the sufficiency of utility revenue to meet current and future financial and policy obligations, the need to provide sufficient revenue to meet operation and maintenance needs and the utility's ability to support the financial impact related to the completion of the identified projects in the Capital Improvement Plan. Appendix 10 presents additional documentation related to this financial plan.

10.2 Past Financial Performance

This section includes a historical summary of financial performance as reported by the City on the fund resources and uses arising from cash transactions specific to the sewer utility.

Chapter 4 identifies the need for the preparation of a wastewater Facilities Plan to develop a detailed plan for how to accommodate projected future growth within the service area and provide the City with additional capacity to continue to produce reclaimed water.

The financial plan presented in this chapter is designed to support the utility in the short term until the Facilities Plan is completed and costs for providing additional capacity can be completely understood. This financial plan is conservatively based on a lower growth rate than that projected in Chapter 2 in order to conservatively reflect the most recent growth rates in utility revenues.

The City will prepare a separate cost of service analysis following completion of this GSP to consider a reallocation of costs to customer classes based on wastewater flow and strength. An updated financial plan will be prepared as part of the Facilities Plan including an update to this cost of service analysis.

10.2.1 Comparative Financial Statement

The City's enterprise funds operate on a cash basis; therefore, annual balance sheets and income statements are not prepared. Table 10-1 summarizes the available level of financial detail for the previous 6 years (2006 through 2011). Noteworthy findings and trends are identified to demonstrate the historical performance and condition of the utility.

Table 10-1 Summary of Historical Resources and Uses Arising from Cash Transactions						
Sewer Fund 412	2006	2007	2008	2009	2010	2011
Beginning Net Cash and Investments	\$1,103,527	\$1,156,905	\$ 894,849	\$ 811,489	\$1,010,291	\$ 975,134
Revenue						
Sewer Service Sales	\$ 955,351	\$ 1,051,013	\$ 1,104,040	\$ 1,203,364	\$ 1,277,421	\$ 1,362,569
Sewer ERU/ hookup Fees	897,605	769,222	878,084	537,075	307,868	292,103
Sale of Reclaimed Water	14,783	17,127	15,496	31,249	18,801	25,158
Sewer Permit Fees	28,515	25,665	29,580	14,210	6,960	7,105
Sewer Latecomer Payments	21,883	36,385	-	11,099	-	-
Investment Interest	156,357	123,668	68,782	18,590	2,643	1,736
Other Miscellaneous Revenue	26,307	35,127	41,796	9,922	-	-
Total Revenue	\$2,100,802	\$2,058,208	\$2,137,779	\$1,825,508	\$1,613,692	\$1,688,672
Gross Revenue	\$3,204,329	\$3,215,112	\$3,032,627	\$2,636,997	\$2,623,984	\$2,663,806
Expenditures						
Operating Costs	\$ 899,415	\$ 1,098,367	\$ 1,230,936	\$ 1,217,875	\$ 1,199,097	\$ 1,225,991
Debt Service	6	-	-	-	-	-
Capital Outlay	-	39,079	46,389	57,248	(2,710)	-
Other Financing Uses	1,148,004	1,182,817	933,066	397,663	406,757	363,381
Total Expenditures and Other Uses	\$2,047,424	\$2,320,264	\$2,210,391	\$1,672,786	\$1,603,144	\$1,589,372
Excess (Deficit) of Resources Over Uses	\$1,156,905	\$ 894,849	\$ 822,236	\$ 964,211	\$1,020,839	\$1,074,433
Nonrevenues	-	-	-	46,080	-	-
Nonexpenditures	-	-	10,747	-	45,705	-
Ending Net Cash and Investments	\$1,156,905	\$ 894,849	\$ 811,489	\$1,010,291	\$ 975,134	\$1,074,433

Findings and Trends

The following identifies findings for the 2006 through 2011 historical period.

- Through a combination of rate increases and customer growth, Sewer Service Sales have been increasing every year between 2006 and 2011.
- Operating costs have increased between 2006 and 2008 and relatively stable at approximately \$1.2 million. The decrease in expenses between 2008 and 2009 came from a reduction in the Salaries & Wages and Services expenses. The decrease between 2009 and 2010 came from a decrease in Services expenses.
- Sewer ERU/ hookup Fees have steadily declined between 2006 and 2011 with a minor increase in 2008, which indicates a reduction in new construction.
- The operations and maintenance (O&M) coverage ratio (service revenues divided by operating expenses) ranged from 106.2 percent in 2006, decreasing to 95.7 percent in 2007, then again to 89.7 in 2008 before rebuilding every year up to 111.1 percent in 2011. A ratio below 100.0 percent leaves little capacity for capital improvements other than paying for improvements by drawing down cash reserves.

10.3 Current Financial Structure

This section summarizes the current financial structure used as the baseline for the capital financing strategy and financial forecast developed for this GSP.

10.3.1 Financial Plan

The City's sewer utility is responsible for funding all of its related costs through user fees. It does not depend on general tax revenues or general fund resources. The primary source of funding for the sewer utility is derived from ongoing charges for service, with additional revenue coming from sales of reclaimed water, sewer permit fees and interest income. The City controls the level of user charges by ordinance, and subject to statutory authority, can adjust user charges as needed to meet financial objectives.

The financial plan can only provide a qualified assurance of financial feasibility if it considers the total system costs of providing sewer service, both operating and capital. To meet these objectives, the following elements have been completed.

1. **Capital Funding Plan:** Identifies the total Capital Improvement Plan obligations of the planning period. The plan defines a strategy for funding the Capital Improvement Plan, including an analysis of available resources from rate revenues, existing reserves, system development charges (SDCs), debt financing and any special resources that may be readily available (e.g., grants, developer contribution, etc.). The capital funding plan impacts the financial plan through the use of debt financing (resulting in annual debt service) and the assumed rate revenue available for capital funding. No new debt was assumed in this analysis.
2. **Financial Forecast:** Identifies future annual capital costs associated with the operation, maintenance and administration of the sewer system. Included in the financial plan is a reserve analysis that forecasts cash flow and fund balance activity along with testing for satisfaction of actual or recommended minimum fund balance policies. The financial plan ultimately evaluates the sufficiency of utility revenues in meeting all obligations, including cash uses such as operating expenses, debt service, capital outlays and reserve conditions, as well as any coverage requirements associated with long-term debt. The plan identifies the future adjustments required to fully fund all utility obligations in the projection period.

10.3.2 Capital Funding Plan

The Capital Improvement Plan developed for this GSP identifies \$2.0 million in project costs over the 6-year period and \$3.8 million in the 20-year planning period. This Capital Improvement Plan consists of Collection System Upgrades, Short Term Improvements, Facilities Plan, General System Plan, Expand Cochrane Park RIBs and various renewal and replacement projects. Costs are stated in 2012 dollars and are escalated by 3.2 percent annually to the year of planned construction for financial projections.

A summary of the 20-year Capital Improvement Plan is shown in Table 10-2. As shown, each year has varied capital cost obligations depending on construction schedules and infrastructure planning needs. Approximately 64.5 percent (2012 dollars) of the capital costs are included in the 6-year planning period. The Short Term Improvements, Facilities Plan, General System Plan and Expand Cochrane Park RIBs account for 83.5 percent of the 6-year Capital Improvement Plan. Table 10-3 provides the detail for the 6-year Capital Improvement Plan.

Certain projects identified as O&M projects in Table 9-1 are shown in the following tables as being paid for as capital projects through the capital fund rather than through the operating fund. This was done due to the nature of the projects. Onetime expenses were paid for through the capital fund reserves while ongoing annual expenses were paid for out of the ongoing rate revenue.

Year	2012\$	Inflated
2012	\$ 369,850	\$ 369,850
2013	701,620	724,025
2014	661,000	703,889
2015	-	-
2016	-	-
2017	162,740	190,437
Subtotal	\$ 1,895,210	\$ 1,988,200
2018-2031	1,187,025	1,824,400
Total	\$ 3,082,235	\$ 3,812,601

Notes:

1. Includes O&M Capital Outlays funded through reserves.
2. Does not include O&M capital outlays listed in chapter 9.

Projects	2012	2013	2014	2015	2016	2017	Total
CIP Projects							
Collection System Upgrades						\$ 162,740	\$ 162,740
Short Term Improvements		300,000					300,000
Facilities Plan	50,000	350,000					400,000
Expand Cochrane Park RIBs			661,000				661,000
GSP	221,000						221,000
Sewer Capacity Work	70,000						70,000
Capital Outlay through Reserves							
SBR Handrails		51,620					51,620
Replace ARVs	12,250						12,250
Replace Influent Flow Meter	8,000						8,000
PAX System Relocation	8,600						8,600
Total	\$ 369,850	\$ 701,620	\$ 661,000	\$ -	\$ -	\$ 162,740	\$ 1,895,210

Notes:

1. The install radio read meter at Cochrane Park project was done before the completion of the GSP; therefore, this project is not listed in chapter 9.
2. Replace ARVs project additional costs from 2013 through 2017 are funded through O&M capital outlays.
3. Does not include O&M capital outlays listed in chapter 9.

10.3.3 Capital Financing Strategy

An ideal capital funding strategy would include the use of grants and low-cost loans when debt issuance is required. However, these resources are very limited and competitive in nature and do not provide a reliable source of funding for planning purposes. It is recommended that the City pursue these funding avenues but assume bond financing to meet the needs of the City when available cash resources are insufficient. The capital financing strategy developed to fund the Capital Improvement Plan identified in this GSP assumes the following funding resources:

- Accumulated capital cash reserves;
- Annual revenue collections from SDCs;
- Annual transfers of excess cash (over minimum balance targets) from the Operating Fund, if any;
- Interest earning on Capital Fund balances and other miscellaneous capital resources.

- The financial strategy is structured so that no new debt issuances would be required in the short term.

Based on the information provided by the City, the Capital Improvement Fund (413) begins 2012 with \$633,000 in cash reserves. SDC revenue collections are assumed at an annual amount of \$605,000 in 2012 (adjusted to year to date figures) which is approximately 95 new Equivalent Residential Units (ERUs), \$314,000 in 2013 and calculated annually thereafter by multiplying the forecasted new ERUs, ranging between 49 and 53 new ERUs per year, by the SDC for that year. It is assumed that the City will use up to 50 percent of its SDC revenue to offset debt service, not to exceed the total annual debt service payment with the exception of 2012 when only \$157,000 is used in order to levelize annual SDC allocation towards debt. Using this sometimes inconsistent and volatile revenue source puts the City at undue revenue risk during low growth periods when SDC revenue may not be sufficient to meet debt service needs. The cash resources described above, coupled with additional transfers from the Operating Fund and interest earnings are forecasted to fund 100 percent of the 20-year CIP. Table 10-4 presents the corresponding 20-year capital financing strategy.

Table 10-4. 20-Year Capital Funding Strategy					
Year	Capital Expenditures 2012\$	Capital Expenditures Escalated	SDC Revenue Towards Capital	Cash Financing	Total Financial Resources
2012	\$ 369,850	\$ 369,850	\$ 369,850	\$ -	\$ 369,850
2013	701,620	724,025	234,611	489,414	724,025
2014	661,000	703,889	159,792	544,096	703,889
2015	-	-	-	-	-
2016	-	-	-	-	-
2017	162,740	190,437	190,437	-	190,437
Subtotal	\$ 1,895,210	\$ 1,988,200	\$ 954,690	\$ 1,033,510	\$ 1,988,200
2018-2031	1,187,025	1,824,400	1,824,400	-	1,824,400
Total	\$ 3,082,235	\$ 3,812,601	\$ 2,779,090	\$ 1,033,510	\$ 3,812,601

The 20-year capital funding plan is funded 100 percent from cash sources. The cash funding represents 72.9 percent from System Development Charge revenue and 27.1 percent from Capital Fund balances.

10.4 Available Funding Assistance and Financing Resources

Feasible long-term capital funding strategies must be defined to ensure that adequate resources are available to fund the Capital Improvement Plan identified in the GSP. In addition to the utility’s resources, such as accumulated cash reserves, capital revenues, and rate revenues designated for capital purposes, capital needs can be met from outside sources such as grants, low-interest loans and bond financing. The following is a summary of the City’s sewer utility resources and outside resources.

10.4.1 Utility Resources

Sewer utility resources appropriate for funding capital needs include accumulated cash in the capital reserve, rate revenue designated for capital spending purposes, and capital-related charges such as System Development Charges and other connection fees. The first two resources will be discussed in the Financial Policies section. Capital-related charges are discussed below.

System Development Charges

An SDC, also called a “connection charge” as provided for by the Revised Code of Washington (RCW) 35.92.025, refers to a one-time charge imposed on new customers as a condition of connection to the utility system. The purpose of the SDC is two-fold: to promote equity between new and existing customers and to provide a source of revenue to fund capital projects. Revenue can only be used to fund utility capital projects or to pay debt service incurred to finance those projects. In the absence of an SDC, growth-related capital costs would be borne in large part by existing customers. In addition, the net investment in the utility already collected from existing customers, through rates, charges and/or assessments, would be diluted by the addition of new customers, effectively subsidizing new customers with prior customers’ payments. To establish equity, an SDC should recover a proportionate share of the existing and future infrastructure costs from a new customer. From a financial perspective, a new customer should become financially equivalent to an existing customer by paying the SDC.

The City currently charges all new sewer customers an SDC of \$6,394 per ERU. Once the Facilities Plan is complete and the full long-term capital program is identified the SDC calculation will be updated.

Local Facilities Charges

While an SDC is the manner in which new customers pay their share of general facilities costs, local facilities funding is used to pay the costs of local facilities that connect each property to the system’s infrastructure. Local facilities funding is often overlooked in a rate forecast because it is funded upfront by either connecting customers, developers, or through an assessment to properties, but never from rates. Although these funding mechanisms do not provide a capital revenue source toward funding CIP costs, the discussion of these charges is included in this chapter, as they represent a potential funding source for future projects. None of the mechanisms described below are anticipated as part of the current financial plan, but may be considered in the future.

A number of mechanisms can be considered for funding local facilities. One of the following scenarios typically occurs: (a) the utility charges a connection fee based on the cost of the local facilities under the same authority as the SDC; (b) a developer funds extension of the system to its development and turns those facilities over to the utility (contributed capital); or (c) a local assessment is set up called a Utility Local Improvement District, which collects tax revenue from benefited properties.

A local facilities charge is a variation of the connection charge authorized through RCW 35.92.025. It is a City-imposed charge to recover the cost related to service extension to local properties. Often called a front—footage charge and imposed on the basis of footage of main “fronting” a particular property, it is usually implemented as a reimbursement mechanism to a city for the cost of a local facility that directly serves a property. It is a form of connection charge and thus can accumulate up to 10 year of interest. It typically applies to instances when no developer-installed facilities are needed through developer extension due to the prior existence of available mains already serving the developing property.

The developer extension is a requirement that a developer install on-site and sometimes off-site improvements as a condition of extending service. These are in addition to the connection charge required and must be built to City standards. The City is authorized to enter into developer extension agreements under RCW 35.91.020. Part of the agreements between the City and the developer for the developer to extend service might include a latecomer agreement, resulting in a latecomer charge to new connections to the developer extension.

Latecomer charges are a variation of developer extensions whereby new customers connecting to a developer-installed improvement make a payment to the City based on their share of the developer’s cost (RCW 35.91.020). The City passes this charge on to the developer who installed the facilities. This is part of the developer extension process, and defines the allocation of costs and records latecomer

obligations on the title of affected properties. No interest is allowed, and the reimbursement agreement cannot exceed 20 years in duration.

Utility Local Improvement District formation is another mechanism for funding infrastructure that assesses benefited properties based on the special benefit received by the construction of specific facilities (RCS 35.43.042). Most often used for local facilities, some Utility Local Improvement Districts also recover related general facilities costs. Substantial legal and procedural requirements can make this a relatively expensive process and there are mechanisms by which a Utility Local Improvement District can be rejected.

Outside Resources

This section outlines various grant, loan opportunities available to the City through federal and state agencies to fund the Capital Improvement Plan identified in the GSP. The short term capital program identified in this plan does not depend on any of these funding sources, but they may be pursued in the future.

Grants and Low Cost Loans

Historically, federal and state grant programs were available to local utilities for capital funding assistance. However, these assistance programs have been mostly eliminated, substantially reduced in scope and amount of replaced by loan programs. Remaining miscellaneous grant programs are generally lightly funded and heavily subscribed. Nonetheless, even the benefit of low-interest loans makes the effort of applying worthwhile. Grants and low-cost loans for Washington State utilities are available from the Washington State Department of Ecology (Ecology) and the Department of Community, Trade and Economic Development. Each department offers programs for which the City might be eligible. They are primarily targeted as sewer programs or low-income and/or rural communities.

Department of Ecology

Ecology's Water Quality Program administers funding programs that provide low-interest loans, grants or loans and grant combinations for projects that protect, preserve and enhance water quality in Washington State.

Department of Community, Trade and Economic Development

The Department of Community, Trade and Economic Development has three grant and loan programs for which the City might be eligible. These programs are:

- The Community Development Block Grants General Purpose Grant
- The Community Economic Revitalization Board (CERB) Grant and Loan Program
- The Public Works Trust Fund (PWTF) Loan Program

Community Development Block Grants General Purpose Grants

These grants are made available to small cities, towns and counties in Washington State carrying out significant community and economic development projects that principally benefit low and moderate income persons.

- Eligible applicants are Washington State cities and towns with population less than 50,000 and counties with populations less than 200,000 that are non-entitlement jurisdictions or are not participants in Housing and Urban Development (HUD) Urban County Entitlement Consortium.
- Eligible projects include public facilities of water, wastewater, and storm sewer and streets.

Community Economic Revitalization Board

CERB primarily offers low-cost loans. Grants are made available only to the extent that a loan is not reasonably possible. The CERB targets public facilities funding for economically disadvantaged

communities, specifically targeting job creation and retention. Priority criteria include the unemployment rates, number of jobs created and/or retained, wage rates, projected private investment and estimated state and local revenues generated by the project. Traditional construction projects are offered at a maximum dollar limit per project of \$1.0 million. A local match of 25 percent is targeted.

- Eligible applicants include cities, towns, port districts, special purpose districts, federally recognized Indian tribes, and municipal corporations.
- Public facilities, bridges, roads domestic and industrial water, earth stabilization, sanitary sewer, storm sewer, railroad, telecommunications, electricity, transportation, natural gas, buildings or structures and port facilities are all eligible.

Terms do not exceed 20 years, including available payment deferral of interest and principal for up to 5 years. Interest rates match the most current rate of Washington State bonds but will not exceed 10 percent.

Public Works Trust Fund

Cities, towns, counties and special purpose districts are eligible to receive loans from the PWTF for water, sewer, storm, road, bridges and solid waste/recycling projects. Funds may be used for repair, replacement, rehabilitation, reconstruction and improvements including reasonable growth (generally the 20-year growth projection in the comprehensive plan).

PWTF loans are available at interest rates of 0.5, 1.0 and 2.0 percent, with the lower interest rates given to applicants who pay a larger share of the total project costs. The loan applicant must provide a minimum local match of funds of 5.0 percent towards the project cost to qualify for a 2.0 percent loan; 10 percent for a 1.0 percent loan; and 15.0 percent for a 0.5 percent loan. The useful life of the project determines the loan term up to a maximum of 20 years.

U.S. Department of Housing and Urban Development – Community Development Block Grant Entitlement Communities Grants

This program provides annual grants on a formula basis to entitlement community grantees to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services, principally for low-and-moderate-income persons.

Eligible grantees are as follows:

- Principal cities of Metropolitan Statistical Areas (MSAs)
- Other metropolitan cities with populations of at least 50,000
- Qualified urban counties with populations of at least 200,000

Thurston County and the cities of Lacey, Tumwater, Yelm, Rainier, Tenino and Bucoda have recently submitted an application to HUD to qualify this group for an annual allocation that can be used for eligible projects/programs. If approved, the distribution of funds will be determined by a committee of representatives from each of the jurisdictions approved by HUD for the annual entitlement grant.

Entitlement communities are NOT eligible for state general purpose Community Development Block Grants.

Rural Development Loan Program

Rural Development funds a grant and loan program for rural communities (less than 10,000 people) for water and wastewater projects. The amount of grant relative to loan is based on the income level of the community and how high rates will be relative to household income. If a grant is offered, the recipient also needs to accept loan funding. The terms for loans are typically on the order of 3.5 to 4.5 percent interest for 40 years. Because Rural Development is a federal program, compliance with the National

Environmental Policy Act is required. Rural Development has a standardized format for the National Environmental Policy Act Environmental Report that needs to be prepared to document impacts and proposed mitigation measures for a project. The National Environmental Policy Act Environmental Report that is produced typically satisfies the documentation requirements for other federal agencies.

Bond Financing

No new debt was assumed in this analysis. The discussion below is presented for reference as these funding sources may be pursued in the future.

General Obligation Bonds

General obligation bonds are bonds secured by the full faith and credit of the issuing agency, committing all available tax and revenue resources to debt repayments. With this high level of commitment, general obligation bonds have relatively low interest rates and few financial restrictions. However, the authority to issue general obligation bonds is restricted in terms of the amount and use of the funds, as defined by state constitution and statute. Specifically, the amount of debt that can be issued is linked to assessed valuation.

RCW 39.36.020(2)(a)(ii) and (b) states,

- (a) Counties, cities, and towns are limited to an indebtedness amount not exceeding one and one-half percent of the value of the taxable property in such counties, cities, or towns without the assent of three-fifths of the voters therein voting at an election held for that purpose.*
- (b) In cases requiring such assent counties, cities, towns, and public hospital districts are limited to a total indebtedness of two and one-half percent of the value of the taxable property therein.*

While bonding capacity can limit availability of general obligation bonds for utility purposes, these can sometimes play a valuable role in project financing. A rate savings may be realized through two avenues: the lower interest rate and related bond costs, and the extension of repayment obligation to all tax-paying properties (not just developed properties) through the authorization of an ad valorem property tax levy.

Revenue Bonds

Revenue bonds are commonly used to fund utility capital improvements. The debt is secured by the revenue of the issuing utility and the debt obligation does not extend to the City's other revenue sources. With this limited commitment, revenue bonds typically bear higher interest rates than general obligation bonds and also require security conditions related to the maintenance of dedicated reserves (a bond reserve) and financial performance (added bond debt service coverage). The City agrees to satisfy these requirements by ordinance as a condition of bond sale.

Revenue bonds can be issued in Washington State without a public vote. There is no bonding limit, except perhaps the practical limit of the utility's ability to generate sufficient revenue to repay the debt and provide coverage. In some cases, poor credit or lack of reserves might make issuing bonds problematic.

10.5 Financial Forecast

The financial forecast, or revenue requirement analysis, forecasts the amount annual revenue necessary from sewer rates. The analysis incorporates projected operating revenues, O&M expenses, debt service payments, rate-funded capital needs and any other identified revenues or expenses related to operations. The objective of the financial forecast is to evaluate the sufficiency of the current level of rates and determine if changes to those rates are necessary.

The analysis determines the amount of revenue needed in a given year to meet the year's expected financial obligations. For this analysis, two revenue sufficiency tests have been developed to reflect the

financial goals and constraints of the City: Cash needs must be met and debt coverage requirements must be realized. In order to operate successfully with respect to these goals, both tests of revenue sufficiency must be met.

- **Cash Test:** The cash flow test identifies all known cash requirements for the City in each year of the planning period. Cash requirements typically include O&M expenses, debt service payments, depreciation funding or directly funded capital outlays and any additions to specified reserve balances. The total annual cash needs of the utility are then compared to projected cash revenues using the current rate structure. Any projected revenue shortfalls are identified and rate increases necessary to make up the short fall are established.
- **Coverage Test:** the coverage test is based on commitments made by the City when issuing revenue bonds and some other forms of long-term debt. As a security condition of issuance, the City would be required per covenant to agree that the revenue bond debt would have a higher priority for payment (a senior lien) compared to most other utility expenditures; the only outlays with a higher lien are O&M expenses. Debt service coverage is expressed as a multiplier of the annual revenue bond debt service payment. For example, a 1.0 coverage factor would imply that no additional cushion is required. A 1.25 coverage factor means revenue must be sufficient to pay O&M expenses, annual revenue bond debt service payments, plus an additional 25 percent of annual revenue bond debt service payments. The excess cash flow derived from the added coverage, if any, can be used for any utility purpose, including funding capital projects. Targeting a higher coverage factor can help the City achieve a better credit rating and provide lower interest rates for future debt issues. An ideal coverage target is 2.0 or above.

In determining the annual revenue requirement, both the cash and coverage sufficiency test must be met and then the test with the greatest deficiency drives the level of needed rate increase in any given year.

10.5.1 Current Financial Structure

The City maintains a fund structure and implements financial policies that target management of a financially viable and fiscally responsible enterprise fund utility.

Fiscal Policies

In developing the financial plan underlying the recommended rate structure, the City has assumed the attainment of certain recommended fiscal policies. The purpose of establishing fiscal policies for the City's sewer utility is to promote the financial integrity and stability of the utility and help ensure the sustainability of essential utility services. A brief summary of the key financial policies employed by the City, as well as those recommended and incorporated in the financial program are discussed below.

Minimum Fund Balances

Operating reserves are designed to provide a liquidity cushion to ensure that adequate cash working capital will be maintained to deal with significant cash balance fluctuations, such as seasonal fluctuations in billing and receipts, unanticipated cash expenses, or lower than expected revenue collection. The analysis assumes the City is to maintain a minimum balance in the Operating Fund equal to 60 days of O&M, ranging from \$226,000 in 2012 increasing to \$284,000 by 2017 as shown in Table 10-6.

A capital contingency reserve is an amount of cash set aside in case of an emergency should a piece of equipment or a portion of the utility's infrastructure fail unexpectedly. The reserve also could be used for other unanticipated capital needs including capital project cost overruns. There are various industry practices in use such as maintaining a balance equal to 1 to 2 percent of fixed assets, an amount equal to a 5-year rolling average of Capital Improvement Plan costs or an amount sufficient to fund an

equipment failure (other than catastrophic failure). The final target level should balance industry standards with the risk and comfort level of the City. The levels used in this plan are summarized in the financial forecast assumptions, below.

The City does not have a formal policy for cash reserves to be maintained in the Capital Fund; discussions with City staff and consideration of industry standards established an internal target of \$392,000 in 2012 increasing to \$408,000 in 2017 based on 1.0 percent of the value of the utility's fixed assets (plant in service), including the value of new improvements that are fully constructed each year. However, to fully fund the 6-year Capital Improvement Fund, the balances will increase and decrease below this target.

System Reinvestment

The purpose of system reinvestment funding is to provide for the replacement of aging system facilities to ensure sustainability of the system for ongoing operations. Each year, the utility's assets lose value, and as they lose value they are moving towards eventual replacement. That accumulating loss in value and future liability is measured for reporting purposes through annual depreciation expense, which is based on the original cost of the assets. While this reported expense reflects the consumption of the existing asset and its original investment, the replacement of the asset will likely cost much more, factoring in inflation and construction conditions. Therefore, the added annual replacement liability is even greater than the annual depreciation expense. Depreciation expense is used many times as a surrogate for minimum system reinvestment funding. Because the City's sewer utility operates on a cash basis, the city does not track depreciation.

The City historically has funded system reinvestment as funds were available on an annual basis. Due to the additional rate increases which would be required to fund annual depreciation, the analysis assumes no annual system reinvestment funding. This is a funding component that should be considered in future updates.

Financial Forecast

The financial forecast is developed from 2012 budget documents along with other key factors and assumptions to develop a complete picture of the sewer utility annual financial obligations. The following is a list of the key revenue and expense factors and assumptions used to develop the financial forecast.

- **Revenue:** The City has two general revenue sources: revenue from charge for service (rate revenue) and miscellaneous (non-rate) revenue. In the event of a forecasted annual shortfall, rate revenue can be increased to meet the annual revenue requirement. Non-rate revenues are forecast to increase with inflation.
- **Reclaimed Water Revenue:** The City currently produces and sells reclaimed water currently budgeted at \$21,745 for 2012. The rate for reclaimed water is set at 80.0 percent of the lowest potable water tier. As discussed in Water Environment Federation Financing and Charge for Wastewater Systems Manual of Practice No.27, setting the reclaimed water rate at a percentage of the potable water rate is a common practice when the cost of reclaimed water is more than the cost of potable water. This discount is offered to provide incentives to users to switch to reclaimed water, releasing demand on potable supplies. The City is currently performing a cost of service study for the Wastewater utility, which will identify the actual cost of reclaimed water and explore alternative pricing options.
- **Growth:** Chapter 2 of this GSP presents population projections through 2015 that reflect a population growth rate of 7.6 percent that was experienced over the period from 2000 to 2010. Projected growth rates for the period from 2015 to 2030 are consistent with Thurston Regional Planning Council (TRPC) projections. The financial chapter rate revenues were escalated based on a 1.8 percent annual growth rate. This growth rate is lower than the growth projection in chapter 2 of the GSP, but is more representative of existing economic conditions. For the short term planning period,

the number of new ERUs is assumed to range from 95 ERUs in 2012 (based on year to date actual information) and 49 through 53 ERUs per year 2013 through 2017 increasing by one additional ERU in every year.

- **System Development Charge Revenue:** The SDC is applied to the projected new ERUs starting in 2012. Based on the growth assumptions described above, the SDC will generate between \$314,000 in 2013 and \$395,000 in 2017 including \$605,000 in 2012. Average annual SDC charge revenue from 2013 to 2017 is approximately \$325,000, or 51 ERUs per year. The City currently applies a portion of SDC revenue towards annual debt service. It is assumed that at a maximum, up to 50 percent of SDC revenue will be applied towards debt service, not to exceed total annual debt service. The remaining SDC revenue is directed towards annual capital.
- **Expenses:** O&M expense projections are based on the 2012 budget. Future years are escalated annually based on various factors and are forecast based on general cost inflation of 2.2 percent, labor cost inflation of 2.0 to 3.0 percent and benefits of 10.0 percent.
- **Excise tax** projections use the 2012 budget and calculate future taxes based on forecast revenues and prevailing tax rates.
- **O&M capital outlays** listed in Section 9, Table 9-1 of the GSP, which were not funded directly through reserves, were included as part of O&M expenses.
- **Additional annual O&M expenses** are incorporated starting in 2016 with an addition of 0.9 FTEs or \$87,700, additional 0.9 FTEs in 2020 at \$98,700, additional 0.8 FTEs in 2025 at \$111,700 and an additional 0.8 FTEs in 2030 at \$129,500. All costs assume salary and benefits.
- **Existing Debt:** The City currently has a total of three outstanding debt issues: two Department of Ecology (DOE) loans and a USDA loan. The first DOE loan is \$93,000 per year and is scheduled to be fully repaid in 2017. The second DOE loan is \$97,000 per year and is scheduled to be fully repaid in 2022. The USDA loan is \$173,000 per year and is scheduled to be fully repaid in 2039.
- **Future Debt:** The capital funding strategy developed for this GSP does not assume the use of any new debt.
- **Transfers to Capital:** Any Operating Fund balance above the minimum requirement is assumed to be available to fund capital projects and is projected to be transferred to the Capital Fund. The 2012 Sewer Operating Fund balance is expected to end the year at 220 days of O&M. It is assumed that excess funds will stay in the Operating Fund through 2016 to help phase-in rate impacts.
- **Capital Fund target balance** is 1.0 percent of the original value of the utility's total assets (plant in service).

Although the financial plan is completed for the 20-year planning period of this GSP, the rate strategy focuses on the shorter-term planning period of 2012 through 2017. It is imperative that the City revisit the proposed rates every 2 to 3 years to ensure that the rate projections developed remain adequate. Any significant changes should be incorporated into the financial plan and future rates adjusted as needed.

Table 10-5 summarizes the annual revenue requirement based on the forecast of revenues, expenditures, fund balances and fiscal policies.

Table 10-5. 6-Year Financial Forecast						
Financial Forecast	2012	2013	2014	2015	2016	2017
Revenues						
Rate Revenues Under Existing Rates	\$ 1,407,436	\$ 1,437,892	\$ 1,463,774	\$ 1,490,122	\$ 1,516,944	\$ 1,544,249
SDC Revenue Towards Debt	157,227	156,967	159,792	162,669	165,597	168,578
Non-Rate Revenue	23,145	24,961	25,207	25,120	28,320	28,497
Total Revenue	\$1,587,808	\$1,619,819	\$1,648,773	\$1,677,910	\$1,710,861	\$1,741,323
Expenses						
Cash O&M Expenses	\$ 1,378,203	\$ 1,446,374	\$ 1,493,173	\$ 1,532,181	\$ 1,672,040	\$ 1,724,659
Existing Debt Service	363,382	363,382	363,382	363,382	363,382	363,380
Total Expenses	\$1,741,585	\$1,809,756	\$1,856,555	\$1,895,563	\$2,035,422	\$2,088,040
Surplus (Deficiency)	\$ (153,776)	\$ (189,937)	\$ (207,782)	\$ (217,653)	\$ (324,561)	\$ (346,717)
% of Rate Revenue	10.93%	13.21%	14.19%	14.61%	21.40%	22.45%
Annual Rate Adjustment	0.00%	5.40%	4.00%	4.00%	4.00%	3.00%
Rate Revenues After Rate Increase	\$ 1,407,436	\$ 1,509,067	\$ 1,599,387	\$ 1,693,304	\$ 1,792,734	\$ 1,881,221
Net Cash Flow After Rate Increase	(153,776)	(124,350)	(82,816)	(30,425)	(70,426)	(36,204)

Notes: Cash O&M Expenses include O&M projects listed in Table 9-1.

Line "Surplus (Deficiency)" shows the surplus or the deficiency in that given year assuming no rate increases occur. Each year is a cumulative deficiency assuming no action occurred. This is done to show the magnitude of the deficiency on an annual basis if no rate action occurs. "Net Cash Flow" after rate increase shows the amount of cash or surplus (deficiency) after the rate increase occurred on an annual basis.

The financial forecast indicates existing rates need to increase approximately 12.6 to 20.4 percent between 2012 and 2017. Because the City currently has adequate Operating Fund balance reserves in excess of the fiscal policy target, the rate strategy developed phases-in the rate impacts at 5.4 percent in 2013, 4.0 percent per year 2014 through 2016 and a 3.0 percent increase in 2017. The rate increases are required to cover the existing level of O&M expenses and debt service.

City Funds and Reserves

Table 10-6 shows a summary of the projected City Operating and Capital Fund balances through 2017 based on the rate forecast presented herein. The operating forecast has a minimum target of 60 days of O&M expenses. The Capital Fund target is set at 1.0 percent of plant in service per year. The combined target balance ranges between \$637,000 in 2013 and \$692,000 in 2017. Assessing the combined fund balances, the minimum targets are exceeded in every year except 2014. In 2014 the combined balance decreases to \$491,000. Balances start to increase again in 2015.

Table 10-6. Ending Cash Balance Summary						
Ending Fund Balances	2012	2013	2014	2015	2016	2017
Operating Fund	\$ 829,888	\$ 705,538	\$ 409,089	\$ 378,664	\$ 308,239	\$ 272,035
Capital Fund	771,501	308,947	82,062	347,854	619,758	705,565
Total	\$1,601,389	\$1,014,485	\$ 491,150	\$ 726,519	\$ 927,997	\$ 977,600
<i>Operating 60 Day Target</i>	\$ 226,554	\$ 237,760	\$ 245,453	\$ 251,865	\$ 274,856	\$ 283,506
<i>Capital Target</i>	392,160	399,401	406,440	406,440	406,440	408,344
Combined Minimum Target Balance	\$ 618,714	\$ 637,161	\$ 651,893	\$ 658,305	\$ 681,295	\$ 691,850

10.6 Current and Projected Rates

10.6.1 Current Rates

The City's current rate structure consists of a fixed monthly charge for all customers. Commercial customers pay a variable charge for all usage above the first 875 cubic feet of water per month. The sewer rate includes a low income/senior discount applied to the flat residential meter charge per month. Table 10-7 shows the existing rate structure for 2012.

Table 10-7. Existing Rate Structure		
Description	Monthly Fixed	Volume/cf
1 SF 1 tank, No Meter	\$ 48.39	n/a
1 SF 1 tank, No Meter, Senior	36.29	n/a
1 SF 1 tank, With Meter	47.95	n/a
1 SF 1 tank, With Meter, Senior	35.96	n/a
2 SF 1 tank, With Meter	47.50	n/a
2 SF 1 tank, With Meter, Senior	35.63	n/a
3 SF 1 tank, With Meter	47.06	n/a
Fourplex, With Meter	38.27	n/a
Residential, Greater Than 4	36.28	n/a
Commercial	48.39	0.0537

Notes:

Commercial volume rate applies for all cubic feet above the first 875 monthly.

10.6.2 Projected Rates

The rates proposed to the City were designed on an across-the-board basis. The flat rates and the commercial volume rates were increased by the overall rate increase shown in Table 10-5. No structural changes were made to the rate structure. Table 10-8 shows the proposed rates for the 6-year planning period.

Table 10-8. 6-Year Proposed Rates						
Description	2012 Existing	2013	2014	2015	2016	2017
1 SF 1 tank, No Meter	\$ 48.39	\$ 51.00	\$ 53.04	\$ 55.16	\$ 57.37	\$ 59.09
1 SF 1 tank, No Meter, Senior	36.29	38.25	39.78	41.37	43.03	44.32
1 SF 1 tank, With Meter	47.95	50.54	52.56	54.66	56.85	58.56
1 SF 1 tank, With Meter, Senior	35.96	37.90	39.42	40.99	42.63	43.91
2 SF 1 tank, With Meter	47.50	50.07	52.07	54.15	56.32	58.01
2 SF 1 tank, With Meter, Senior	35.63	37.55	39.06	40.62	42.24	43.51
3 SF 1 tank, With Meter	47.06	49.60	51.59	53.65	55.79	57.47
Fourplex, With Meter	38.27	40.34	41.95	43.63	45.37	46.73
Residential, Greater Than 4	36.28	38.24	39.77	41.36	43.01	44.30
Commercial - Monthly Fixed	48.39	51.00	53.04	55.16	57.37	59.09
Commercial - Volume/cf	0.0537	0.0566	0.0589	0.0612	0.0637	0.0656

Notes:

Commercial volume rate applies for all cubic feet above the first 875 monthly.

10.7 Affordability

A common affordability index used by agencies such as the Environmental Protection Agency (EPA) and Department of Ecology (DOE) to prioritize low-cost loan awards is whether rates exceed 2.0 percent of the median household income for the demographic area. The median household income for the City in the 2006-2010 United State Census Bureau Quick Facts was \$55,227. The 2010 figures were escalated up to 2011 levels based on the Consumer Price Index (CPI). 2012 through 2017 were forecast using a 5-year CPI average of 2.2 percent. Table 10-9 presents the City's rates with the projected rate increases annually for the forecast period, tested against the 2.0 percent affordability threshold.

Year	Inflation	Median HH Income	Percentage of Monthly Income	Projected Single Family Bill
2010		\$ 55,227		
2011	3.16%	56,970		
2012	2.23%	58,239	1.00%	\$ 48.39
2013	2.23%	59,536	1.03%	51.00
2014	2.23%	60,861	1.05%	53.04
2015	2.23%	62,216	1.06%	55.16
2016	2.23%	63,602	1.08%	57.37
2017	2.23%	65,018	1.09%	59.09

Notes:

Single Family bill assumes a 1 SF 1 Tank, No Meter Rate.

Applying the affordability test, the City's rates are forecasted to range between 1.0 percent in 2012 up to 1.1 percent in 2017, which are below the 2.0 percent threshold.

10.8 Conclusion

The results of this analysis indicate that rate increases are necessary to fund ongoing operating needs and existing debt requirements. Implementation of the proposed rate increases should provide for continued financial viability while maintaining generally affordable rates.

The City will regularly review and update the key underlying assumptions that compose the multi-year financial plan to ensure that adequate revenues are collected to meet the total sewer utility financial obligations.