CHAPTER 9

Financial Analysis

INTRODUCTION

The Washington State Department of Ecology requires a sanitary sewer system plan to have a financial section that demonstrates financial viability by providing a summary of past income and expenses; a balanced budget; a funding plan; and consideration of a rate structure addressing affordability and conservation.

One of the City of Bonney Lake's (City) most important objectives is to secure the necessary resources to fund needed capital improvement projects and support the ongoing operational requirements of the sewer system. In the formulation of the financial plan, RH2 Engineering, Inc., (RH2) reviewed financial, operational, and budget information, and worked with City staff and consultants to evaluate policies and strategic options to strengthen the sewer utility's financial position. While a combination of policy and operational steps are being evaluated, a refined rate structure that provides clear price incentives to customers is considered to be one of the most important elements to achieve rate equity and efficiency.

In executing this financial planning effort, the historical financial condition of the utility was documented; capital funding options were identified and evaluated; and the feasibility and impact of funding the capital improvement program (CIP) was evaluated.

CAPITAL FUNDING OPTIONS

The City may fund the sewer CIP from a variety of sources. In general, these sources can be summarized as: 1) governmental grant and loan programs; 2) publicly issued debt; and 3) utility cash resources and revenues. These alternative sources are described in the following section. In addition, there are numerous system improvements, primarily in the form of system extensions, that are required of developers as a condition of service. Since there is no impact to rates stemming from these improvements, they are not addressed in this analysis.

Governmental Grant and Loan Programs

Historically, federal and state grant programs were available to local utilities for financial assistance; for the most part, these have been eliminated or replaced by loan programs. Remaining miscellaneous grant programs are generally lightly funded and highly competitive. Nonetheless, the benefit of even low-interest loans makes the effort of applying worthwhile. State programs reviewed as potential funding sources for the utility improvements set forth in the City's 2018 Sewer System Plan (SSP), are summarized below.

- **Public Works Trust Fund** – The Public Works Trust Fund (PWTF) was commonly used to obtain low cost revolving loans. It was established in 1985 by the Washington State legislature to provide financial assistance to local governments, such as the City, for public works projects. Eligible projects included repair, replacement, rehabilitation, reconstruction, or improvement of eligible public works systems to meet current standards for existing users. This program has been raided by the legislature and is no longer a viable program that can be relied upon by cities.
- **Community Economic Revitalization Board** – Managed by the Washington State Department of Community Trade and Economic Development (WSDCTED), this program provides grants and loans to fund public facilities that result in specific, private sector development. Eligible projects include water, sewer, roads, and bridges. Funding varies.
- **Community Development Block Grant (CDBG) Program** – Also administered by the WSDCTED, the CDBG program provides grants and loans for infrastructure improvements, including water projects, for business development that create or retain jobs for low- and moderate-income residents.
- **Department of Ecology** – The Washington State Department of Ecology (Ecology) Water Quality Financial Assistance Program sponsors four grant and loan programs: The Centennial Clean Water Fund; Federal 319 Programs; State Revolving Fund (SRF) Loans; and the Aquatic Weeds Grant Programs.

Publicly Issued Debt

Revenue Bonds – One of the most common sources of funds for construction of major utility improvements is the sale of revenue bonds. Revenue bonds are issued by utilities and typically repaid from rate revenues. In order to qualify to sell revenue bonds, the City must show that its net operating income (gross income less expenses) is equal to or greater than a factor, typically 1.3 to 1.4, times the annual revenue bond debt. This factor is commonly referred to as the coverage factor, and is applicable to revenue bonds sold on the commercial market. The coverage requirement is one of two factors (together with cash needs) that could trigger future rate increases. Although commonly used, revenue bonds incur relatively high interest rates and, therefore, should be relied upon only after all other grant and low-interest loan options have been exhausted.

Utility Cash Resources and Revenue

Utility financial resources available for capital funding include rate funding, cash reserves, and System Development Charges (SDC).

- **Rates and Rate Funding** – At this point, the City does not have a specific policy in place for cash funding capital projects through rates. Direct rate funding of capital improvement and replacement projects has historically been funded on an as-needed, pay as you go basis.
- **Cash Reserves** – As mentioned previously, the City does not currently have cash reserves available to assist in funding the entire proposed CIP. The rate increases presented herein will assist the City in rebuilding these reserves over time.
- **Capital Facilities Charges** – The City imposes an SDC on all new connections to the sewer system. The purpose of the SDC is two-fold: 1) to promote equity between new and existing customers; and 2) to provide a source of revenue (contributed equity) 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. SDC revenues provide a source of cash flow used to support utility capital needs. SDC revenues 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 costs would be borne, in large part, by existing customers. In addition, the net investment in the utility already collected from existing customers, whether 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, a 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 current 2019 SDC is $10,505 for a single-family sewer connection. Revenues generated from this source are projected at around $800,000 to $1,600,000 a year.

PROJECTION OF FINANCIAL PERFORMANCE

The projection of financial performance begins with the 6-year capital funding strategy, followed by the projection of cash operating expenses, and, finally, a summary of revenue requirements and necessary rate adjustments. The results of the revenue requirement analysis are significantly

affected by underlying economic, financial, and policy-based assumptions used in the revenue and expense forecasts. It is important to recognize the sensitivity of the study's results to changes in the forecast assumptions discussed below.

The following forecast assumptions were used in the analyses.

- Capital projects planned over the next 6 years (2018 through 2023) total $10.4 million (2018 dollars) and should function as the basis for evaluating future funding rate impacts.
- Consistent with this SSP, customer growth is projected at approximately 3.0 percent per year.
- Labor cost inflation is estimated at 3.0 percent.
- Construction material inflation is estimated at 3.0 percent.
- In projecting future cash flows in the water utility fund, an earnings rate of 1.5 percent has been used to calculate interest earned on available cash balances. State taxes have been computed using prevailing excise, and business, and occupation rates for water rates and miscellaneous revenues.

Capital Funding Strategy

The revenue requirement analysis not only projects the operating requirements of the utility, but also incorporates planned capital needs for projects the City must complete. The capital funding component evaluates expected capital costs and available resources to determine whether additional funding for such projects will be required from rates, either to pay for new debt service or to directly fund the capital projects.

The City has historically funded capital projects through rate and SDC revenues, and state loans (PWTF and SRF). However, the PWTF program is all but defunct, and the SRF program is cumbersome and expensive to administer.

Fiscal Policies

Critical to the long-term financial health and performance of the water utility is the development of sound fiscal policies to guide the financial performance of the utility. The key policies incorporated into this financial plan include:

- Maintaining a minimum operating reserve balance;
- Maintaining a minimum capital reserve balance; and
- Managing system reinvestment funding through rates, using depreciation expense as the benchmark for the appropriate level of funding. The annual contribution is based on net-depreciation funding from rates, which equals the annual depreciation expense less annual principal payments. This benchmark is roughly equivalent to break-even performance from a balance-sheet perspective.

Revenue Requirements

The purpose of the revenue requirement analysis is to provide a forecast of rate revenue needs to meet ongoing costs, capital needs, and fiscal policies, allowing the City to implement projects

necessary to meet water quality standards and allow continued growth and development of the community, as outlined in this SSP.

For rates to be sufficient, two individual conditions must be met:

1) Cash requirements must be fulfilled; these requirements may include discretionary elements established by the City's fiscal policies, as well as basic operating and capital-related needs; and
2) All coverage requirements stipulated in bond or loan covenants, as a condition of borrowing money, must be realized.

Integrated into the technical approach are two sufficiency tests intended to verify the status of these conditions. The Cash Flow Sufficiency Test examines all known cash requirements for the utility, using budgeted annual revenues and expenditures, and projections based on the budget for the remaining years in the study period. (For this SSP, a planning horizon of 6 years was used.) Cash requirements consist of operating and maintenance expenses, existing debt service, new debt required for capital programs, directly funded capital projects, depreciation-based capital funding for the repair and replacement of system infrastructure, and any other projected additions to the reserves. All cash revenues of the system, including rate revenue, miscellaneous service revenue, revenue transfers, and operating fund interest earnings, are compared against the total annual cash needs of the system. Any deficiencies are identified, and the level of rate increase necessary to make up the shortfall is calculated.

The Coverage Sufficiency Test recognizes the cash needs of the utility in conjunction with any commitments to meet coverage requirements associated with debt service obligations. Coverage is a requirement of any bond covenant and some state loan programs.

The sufficiency test assumes that in the event of a shortfall, rates represent the revenue source that is controllable, and can and should be increased to meet the deficiency. Utility revenues should be sufficient to meet both the cash and the coverage tests; thus, the test with the greatest deficiency will drive the level of rate increase required.

RATE ASSESSMENT

The last rate assessment included a review of projected rate levels and affordability, as well as a discussion of the effectiveness of the current rate structure to address conservation.

Rate Levels

The last rate analysis was conducted in 2018. Current rates for the City system are as follows.

Sewer Base Rates (BLMC Chapter 13.12.082)

For single-family residences, sewer availability charges shall be billed monthly and volumetric charges shall be billed bimonthly. Sewer charges for customers other than single-family residential shall be billed monthly.

Single-Family Sewer Availability Charge *NOT requiring or using a city-owned grinder pump.*	
Sewer availability charge*	**$72.32**
Volumetric charge per 100 cubic feet (CCF) of monthly water consumption	**$4.50**

Single-Family with Grinder Pump Availability Charge	
Sewer availability charge*	**$86.78**
Volumetric charge per 100 cubic feet (CCF) of monthly water consumption	**$4.50**
Grinder Pump Charge**	**$20.00**

* Per BLMC 13.12.082(C), qualifying seniors/disabled persons may apply for a 20% reduction from the sewer availability charge. For details see www.citybonneylake.org/utilities or call 253.447.4317.

** **Grinder Pump Rates**: See BLMC 13.12.090. A separate Sewer Availability Charge applies to single-family residents using a city-owned grinder pump (Grinder Pump rate). In addition, for every building using a domestic grinder lift pump utilizing electric power furnished by the city or maintained by the city, there shall be an additional monthly Grinder Pump Charge to reimburse the city for the cost of the electric power and/or for the service on the pumps.

Notes:

- **Single-Family Residences**: The volumetric charge shall be capped at 10 CCF per month.
- **Multi-Family and Duplex**: Customers on a single water meter shall pay the single-family sewer availability charge for each unit. The volumetric charge shall be capped at 8 CCF per month.
- **Mobile Home Parks**: Charged at the single-family rate; when multiple units use one water meter, each unit pays the single-family sewer availability charge. Volumetric charge capped at 10 CCF per unit per month.
- **Non-Residential**: Charged one single-family sewer availability charge per installed water meter. No cap for volumetric charge.