CITY OF BEND SEWER SYSTEM FUNDING AND FINANCING

The City operates its sewer system as an enterprise activity based on full cost recovery through user charges. Funding for sewer system operations and capital investment needs come primarily from user rates, system development charges and other user related charges. By law, sewer system enterprise funds cannot be used to supplement other city enterprise or General Funds

This document discusses the sources of funds, financial policies and processes used by the City to determine the funding and financing for its sewer system.

1. SOURCES OF FUNDS FOR SEWER SYSTEMS

The various sources of funds to pay for sewer system operations and capital needs are as follows:

User Rates and Charges – Operating expenses of the system are funded by system wide user rates and charges. Capital improvements that benefit the system as a whole are also funded through system wide user rates and charges or financed with debt and repaid over time through user rates and charges.

Debt Issuance – When debt is necessary to finance capital improvements, the City either issues revenue bonds, full faith and credit bonds or obtains loans through state agencies such as the Oregon Business Development Department or Department of Environmental Quality that offer municipal infrastructure financing programs. Debt is repaid through user rates and charges and system development charges.

The City may also obtain voter approval for General Obligation (GO) Bonds to finance utility infrastructure improvement that benefit its citizens. GO Bonds were issued in the 1970's to fund improvements to the City's sewer treatment plant. Repayment of GO Bonds is made from property taxes assessed on all properties in the city.

Grants – Most grants available from state and federal agencies for sewer infrastructure needs target pilot projects and innovative or "green" projects. Grants are typically not available for standard utility infrastructure needs such as replacing sewer mains or building of pump stations to meet on-going demand. The City researches and applies for grants whenever they are available and applicable.

System Development Charges (SDCs) - Growth related capital improvements are funded by SDCs which are assessed on new development. The SDC fee is established by methodology studies and increased each year by the Engineering News Record Index. The City last updated its sewer SDC methodology in 2008. The FY2012-13 sewer SDC for a single family dwelling is \$2,840.

Private Development Funds – Sewer infrastructure needed to serve a new residential subdivision or commercial development are typically constructed and funded by the developer and dedicated to the City for on-going maintenance.

Local Improvement Districts (LIDs) and Surcharges – Local sewer infrastructure improvements that benefit specific properties in a defined area (such as sewer mains constructed to replace septic tanks) are funded by LID assessments or surcharges (additional monthly charges on top of the regular monthly sewer charge).

2. HOW IS FUNDING AND FINANCING DETERMINED

The City develops long term financial plans for its sewer system by maintaining a 10 year sewer financial model. Adopted policies and principals guide the City in developing the financial model to ensure sound financial management of its sewer business.

Financial Policies and Principles

The following adopted policies and principles reflect industry standards and best practices for managing the finances of the City's utility systems:

- 1. Utility funds will be self-supporting through user fees
- 2. Utility rate adjustments will be based on long term financial plans to achieve financial stability. The City will strive to make rate adjustments consistent and not erratic for the customer
- 3. System development charges will fund growth related capital needs
- 4. The City will determine the least costly funding method for its capital projects and will obtain grants, contributions and low cost state or federal loans whenever possible
- 5. The City will utilize "pay-as-you-go" funding for capital improvement expenditures considered recurring, operating or maintenance in nature. The City may also utilize "pay-as-you-go" funding for capital improvements when current revenues and adequate fund balances are available or when issuing debt would adversely affect the City's credit rating
- 6. The City will consider the use of debt financing for capital projects under the following circumstances:
 - a. When the project's useful life will exceed the terms of the financing
 - b. When resources are deemed sufficient and reliable to service the long-term debt
 - c. When market conditions present favorable interest rates for City financing
 - d. When the issuance of debt will not adversely affect the City's credit rating and coverage ratios

- 7. The City will strive to maintain debt coverage ratios and percentages that uphold the City's credit rating. Water and Water Reclamation (Sewer) debt coverage ratios should be maintained at a minimum of 1.50 or at a level sufficient to protect the credit rating of the Water and Water Reclamation systems
- 8. The City will maintain undesignated reserves of at least 25% (or 3 months) of the operating budget for its utility funds

Policies related to the City's utility systems are adopted by the City Council as part of the City of Bend's Fiscal Policies.

Sewer Financial Model

The City maintains a 10 year sewer financial model developed by the City's utility rate consultant (Galardi Consulting) and updated twice a year by city staff. The purpose of the financial model is to:

- 1. Forecast sewer revenues and expenditures over the next 10 years
- 2. Determine financing requirements for capital needs
- 3. Determine reserve requirements
- 4. Set sewer rates
- 5. Ensure compliance with city adopted financial policies and principals
- 6. Generate a long term financial plan for the sewer business

Major assumptions for the financial model are developed as follows:

- Customer growth and water consumption assumptions these assumptions are based on historical and current trends.
- Operating expenditures these costs are projected as a percentage increase or decrease from prior year costs based on changes in customer accounts and consumption. Any one time expenditures based on specific operating needs are also identified by staff and included in the model.
- Capital expenditures 10 year capital improvement needs are based on the latest sewer master plan studies and as refined by the City's Engineering staff.
- Debt assumptions Capital expenditures too large to be funded from available revenues are financed with 20 to 25 year debt in the financial model. Interest rate assumptions are based on current projections developed by the City's bond financial advisor.
- Reserve assumptions The financial model calculates 3 months of operating expenses for operating reserves and 1 year of debt service payments as debt reserves for revenue bonds issued.

Based on the assumptions entered, the financial model will determine how much sewer rates need to be adjusted to provide the revenues necessary to fund expenditures and reserves and to repay debt. As noted above, the financial model generates the city's long term financial plan for the sewer system as it establishes revenue and expenditure

projections, identifies long term capital needs, and determines debt and rate requirements in compliance with the city's financial policies and principals.

The debt and rate requirements generated by the financial model are evaluated for affordability as further discussed below.

3. SETTING SEWER RATES

As discussed above, sewer rate adjustments are determined through the sewer financial model. The City strives to develop consistent and not erratic rate adjustments for its rate payers. The City also strives for inter-generational equity to avoid burdening future generations in order to benefit current rate payers and vice versa.

Sewer Bill Affordability

It is important for every community to ensure that its utility rates are affordable for all households in the community. Affordability of utility bills is subjective and can be hard to define. The EPA has determined a national-level affordability measure of 2.5% of median household income for a utility. This measure is a "look across all the households in a given size category of systems and determines what is affordable to the typical, or middle of the road household." This measure does not determine affordability for an individual household (ie. the 2.5% threshold does not mean that each individual household should not pay more than 2.5% of its income for sewer services).

Bond rating agencies also look at affordability of rates and projected rate increases as one of many factors in determining credit quality. Fitch Ratings generally considers rates for combined water and sewer service higher than 2% of median household income (or 1% for individual water and wastewater utilities) to be financially burdensome (Water and Sewer Revenue Bond Rating Guidelines, FitchRatings August 6, 2008).

The City of Bend's sewer bill as a percent of median household income over the last few years is as follows:

	Median Household Income (MHI)	Annual Residential Sewer Bill *	% of MHI
2009	\$54,770	\$408	0.7%
2010	\$46,090	\$444	1.0%
2011	\$46,816	\$488	1.0%
2012	not available **	\$517	

^{*} includes 3% franchise fees

^{**} will be released in 2013

As noted above, affordability of utility bills is hard to measure and is debatable. When raising sewer rates, the City considers the affordability of rate increases on low income households and also the community's rate tolerance and willingness to pay.

The City has developed low income assistance programs to enhance affordability for low income households. Currently the City has a 50% sewer discount program for low income seniors and disabled. The City also has a Utility Billing Assistance program that provides utility bill assistance of up to \$150 for low income households.

4. Debt Management

When issuing long-term debt, the City will ensure that there is sufficient debt capacity and that the debt is financially manageable by adhering to the following principals:

- 1. Debt is issued only when necessary for capital improvements too large to be funded by current available resources
- 2. Capital projects financed through long term debt shall be financed for a period not to exceed the useful life of the project
- 3. Sources of repayment, debt ratios and the affordability of debt will be analyzed prior to issuance of long term debt

State or Federal Loan Programs

The City will also determine the least costly financing available. The City evaluates the cost of issuing debt versus applying for loans available through programs administered by state or federal agencies. Currently the Oregon Business Development Department (OBDD) offers the Oregon Bond Bank Water/Wastewater Financing Program while the Department of Environmental Quality (DEQ) offers the Clean Water State Revolving Loan Fund program. These programs may offer loans at low interest rates and if the total cost of obtaining such loans is lower than the total cost of issuing debt, the City will apply for such loans with the OBDD or DEQ. These loan programs have a maximum borrowing limit per year and are also awarded to communities based on certain criteria determined by the state agencies.

The City was recently awarded \$38.8 million in DEQ loans for its Water Reclamation Facility Expansion project.

Bonds Issued by City

If the City decides to issue debt for its sewer capital improvements, the City works with its bond financial advisor (Western Financial Group) and bond counsel (Orrick Herrington & Sutcliff) to determine debt structure and terms, timing of debt issuance and other requirements of the debt. The City may issue revenue bonds or full faith and credit bonds to finance sewer capital improvements.

Revenue bonds are secured by the revenues of the sewer system and contain covenants and reserve requirements. Covenants typically call for minimum 1.25 debt coverage ratios.

Full faith and credit bonds are secured by the City's full faith and credit and do not contain reserve requirements. Full faith and credit bonds issued for sewer capital improvements are repaid from the revenues of the sewer system. Any full faith and credit bonds issued for sewer system needs are on par with revenue bonds issued for the sewer system and as such are subject to the debt coverage ratio requirements.

Credit Rating

The City strives to maintain debt coverage ratios and percentages that uphold the City's credit rating. The City's sewer revenue bonds are currently rated Aa2 by Moody's Investor Services.

Debt Capacity

The City determines debt capacity for its sewer capital improvement plans by evaluating various debt ratios and percentages.

Debt Service Coverage - The debt service coverage ratio is a measure of debt capacity. It shows the multiple of net revenues to debt service, with higher coverage generally indicating a revenue stream that comfortably covers debt obligations (ie an affordable debt burden). Systems with a lower debt service coverage may experience difficulty in meeting rising operations and maintenance expenses. For FY 2011-12, the City's sewer system's total debt coverage ratio was 3.2.

Debt to Operating Expenses – a high percent of debt to operating expenses may indicate a high debt burden and raise concerns of financial inflexibility. For FY 2011-12, the City debt to operating expense is 28% for its sewer system.

Debt to customer – total outstanding long term debt per customer indicates the existing debt burden (principal payments) attributable to each customer. As of 6/30/12, the City's debt to customer is \$1,137 for its sewer system.

Other debt factors considered include debt to plant (total debt as a percent of the value of the net property, plant and equipment) and liquidity ratios which determine sufficiency of cash on hand for debt service and operations.

Projections of these ratios are made along with projections in the financial model to determine if debt needed are within reasonable debt burden levels for the City's sewer systems.