Updating Bend's Sewer Collection System Master Plan

Overview

The City of Bend is beginning an update of its Sewer Collection System Master Plan that will guide future improvements for sewer infrastructure. The update is being prepared by City Public Works staff with the assistance of engineering, environmental and financial specialists, and citizen advisors. The goal is for the new Master Plan to be ready by late 2013.

An 18-member citizen committee, the Sewer Infrastructure Advisory Group, has been appointed by Bend City Council to advise the sewer planning.

About the Master Plan

Bend's current Sewer Collection System Master Plan was adopted in 2007 and needs an update. The Master Plan is an engineering / technical document that shows how wastewater is collected from customers around the city and conveyed to Bend's water reclamation facility located east of town near the Bend Airport. The Master Plan is required by state and federal regulatory agencies and must be kept up-to-date. Wastewater facilities are closely regulated to protect public health and the environment.

The Master Plan update answers important questions such as:

- What factors influence future requirements for Bend's sewer system: service boundaries, condition of the existing collection system, population, employment growth, new regulations?
- What principles and priorities should guide the Master Plan update? (e.g., environmental protection, public health, energy efficiency, cost-effectiveness)
- Which facilities need to be constructed or improved, and when?
- What should be Bend's immediate—midterm—and long-term priorities for the sewer system?
- How will sewer system improvements be financed?

Bend's Sewer Collection System's Pressing Needs

Bend's sewer collection system has a number of identified deficiencies.

System at capacity: In some areas, existing sewer pipes are flowing well above their design capacity and routinely approach overflow levels. In certain parts of the City, Bend would have difficulty serving any major new employers or developments.

Piecemeal infrastructure: Bend's growth over the past decade has resulted in a system that is somewhat unusual and complex compared to peer communities. The pattern of development and patchwork sewer system pose unique engineering challenges. **Unsewered areas:** Large areas of developed land in Bend, especially in the southern part of the city, depend on septic systems. As aging systems fail and state regulations make it difficult for septic systems to continue, Bend struggles to find ways to bring sewer service to these in-town subdivisions.

High operating costs: Bend has more sewage pump stations (336) than Portland, Salem, and Eugene combined. Pumps require ongoing maintenance and consume lots of electricity.

Waste water Treatment Improvements

The Sewer Collection Master Plan addresses only the sewer collection system. Planned expansion and improvements for Bend's water reclamation facility are also critical. The treatment plant upgrades are in final design and are scheduled to be completed by 2015.

Paying for Sewers

Under Bend's policies, sewers are part of a wastewater utility that is self-supporting. Wastewater system *operating costs* are paid by customers' monthly sewer rates. These rates are reviewed and adjusted annually and must be approved by Bend City Council.

Capital costs are paid through a combination of rates, proceeds from SDCs (systems develop charges) paid by new development, plus funds borrowed through Federal/State loans or the sale of municipal bonds. Debt is most often used to finance major capital projects and must be approved by the City Council. These loans are paid back by customers' monthly sewer rates, SDCs and other sewer system revenues. General Obligation (G.O.) bonds provide another financing method backed by property tax revenues, and must be approved by the City Council and Bend voters. Other alternative funding options include LIDs (local improvement districts), urban renewal, and public / private partnerships.

Updating the Sewer Collection System Master Plan will result in a list of priority improvements that will need to be paid for through a combination of financing options. Because of Bend's critical sewer deficiencies, any solutions will result in rate increases.

Coordinating with Other Infrastructure Planning

Sewer planning must be coordinated with other infrastructure needs. These facilities often serve the same customers and share the same public right-of-way. Bend's sewer, water and transportation systems all need major upgrades, expansion—and investments. Future sewer system improvements rely on funding solutions that must be well coordinated with the City's other financial needs for infrastructure and services.

How the Master Plan is Linked to Land Use Planning

Oregon land use planning laws require Bend and other cities to maintain, as elements of their Comprehensive Plans, public facilities plans for key infrastructure: water, sewer, transportation. These facilities plans must show how future services will be provided inside the city and within its urban growth boundary (UGB) over 20 years.

The updated Sewer Collection System Master Plan will also contribute a component of the data for the sewer public facilities plan and analysis of any future UGB expansions.

Learn More

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