City of Bend
Surface Water Improvement Project
September 27, 2011 Open House Summary

Summary

About 35 people attended an open house on September 27, 2011 from 6:00 – 8:00 p.m. in the Council Chambers of Bend City Hall to discuss the Surface Water Improvement project with residents. Heidi Lansdowne, the project manager for the City of Bend, gave a brief overview of the project with a PowerPoint presentation at 6:15 p.m. The project team provided information to residents, answered questions, and collected public feedback about the project. Staff from the U.S. Forest Service attended to provide information about the National Environmental Policy Act (NEPA) process that the project is undergoing, and staff from Western Federal Lands Highway Division attended to answer questions about the Skyliners Road Improvement Project, which has been coordinated to take place after the new pipe is installed beneath the roadway.

The open house was publicized using a variety of methods. Open house invitations appeared in the September water bill insert and were also sent via email to the project's public outreach distribution list in the monthly updates for August and September. Two display advertisements appeared in the Bend Bulletin and one in the Source Weekly during the week before the open house. Invitations were posted on Facebook and Twitter, and the project's website. A press release was sent out on September 13, 2011.

The open house materials included display boards, an interactive touch screen that let people engage with construction components of the project, a fact sheet, and a comment form. The display boards and fact sheet are available online. Although no written comments were received, attendees asked questions directly to staff. The most frequent questions and answers from the open house are summarized below.

Common Questions

Water treatment and pipeline improvements

- **Why does the City need a new water treatment plant?**

  The United States Environmental Protection Agency has issued new drinking water regulations that require treatment of unfiltered surface water to inactivate or remove cryptosporidium, a pathogenic microorganism that is resistant to chlorine. This means that the City is required to build a new treatment facility for the water that comes from the City's Bridge Creek intake. The City Council selected microfiltration for treatment. Microfiltration will improve drinking water quality by providing a barrier to the passage of pathogenic microorganisms, removing particulate matter,

allowing continuous use of surface water throughout the year, allowing fire prevention measures to occur in the protected watershed, and also protecting drinking water in the event of a forest fire that degrades raw water quality.

- **How did the City decide on a 30-inch diameter water supply pipe?**

  A 30-inch diameter pipeline is a standard size that provides a good balance between cost-effectiveness, a large enough diameter to allow internal welding, inspections and maintenance, and appropriate internal water velocities for pipe longevity and transient pressure control. The new 30-inch diameter pipe will replace two existing 12- to 14-inch diameter pipes. This pipe size was evaluated and confirmed during a formal Value Engineering Study attended by a group of independent engineers.

- **Is the City planning to remove the existing pipes where they pass through private property?**

  The City is not currently planning to remove the existing pipes where they pass through private property.

Water flow

- **What is the average flow in Tumalo Creek?**

  The average flow in Tumalo Creek is about 100 cubic feet per second (cfs). Flows are typically higher in early summer when snow is melting.

- **How much water does the City divert with the existing system and how much will it divert with the new system?**

  The City's existing system lacks flow control and has, for the last 55 years, diverted water at a constant rate of 18.2 cfs, even when actual City use is lower. With the existing system, unused water is returned to Tumalo Creek downstream of the City's Outback Site.

  The new system will include flow control, enabling the City to divert only the water needed for municipal use. The City currently plans to operate the new system within an annual average diversion of *up to* 21 cfs. With the new system, the City will only divert more than 18.2 cfs when there is a municipal demand for it, and the water is available. Availability is based on water rights and available flow.

Costs

- **Why do the project costs keep changing?**

  Cost estimates have been, and will continue to be, updated as engineering designs move forward. As the engineering designs get more detailed, more information is known about materials, facility configurations, and construction practices. The costs are updated to reflect this changing information.

- **Are anticipated project costs justified given the current economic climate and the City's future water demand?**

  Yes, the anticipated project costs are justified and represent an investment in water supply reliability, cost-effective long term operations, and meeting Bend's long-term water supply needs. The existing surface water system has been in operation for almost 90 years and the new surface water system will have a similar design life. By year 50 of operation, the new gravity-fed and energy efficient surface water system will be providing an estimated $9 million annual benefit to the community. The new system is anticipated to generate about $2 million per year in net revenue from the hydro power facility (after all system operating and maintenance costs are paid). Further, the new system is anticipated to avoid about $7 million per year in additional groundwater pumping, operation, and maintenance costs. This project allows the City to plan ahead and ensure that Bend residents and businesses will continue to benefit from an exceptional, secure, and cost effective water source.

- **Why doesn't the City take water from a point on Tumalo Creek closer to the Outback site to save money in pipe costs?**

  This option was considered and dismissed previously in the 2009 Water Supply Alternatives Study. This alternative would be more expensive over time due to the need for pumping. Moving the point of diversion downstream also introduces risks associated with:

  - **Water rights:** It would require a complex series of water rights transactions to "transfer" the City's water rights downstream to a new point of diversion. Some of the City's "senior" water rights are currently not eligible for transfer downstream.
  - **Water quality:** Moving the point of diversion outside of the City's protected watershed, downstream of development, could introduce contaminants such as septic drainfields and pesticides/herbicides.

  In addition to the above there are environmental concerns associated with fish passage at a new diversion site lower in the creek, a new intake/pump station and road that would be required, and the potential need for placing the pipeline in the forest rather than under the Skyliners road footprint.

Schedule

- **How are the schedules for the Surface Water Improvement project and the FHWA Skyliners Road project connected?**

  FHWA is planning to rebuild Skyliners Road starting in 2013. It is imperative that the pipeline be installed in Skyliners Road prior to new roadway construction to protect the investment in the new roadway and to reduce pipeline construction costs. A delay with installation of the pipeline would likely delay the Skyliners Road improvements.