



# INTEGRATED WATER SYSTEM MASTER PLAN

*The City of Bend is working to ensure that it can continue to deliver safe, clean and reliable water at an affordable cost for all members of the community.*

## **What is a Water Master Plan?**

State guidelines recommend utilities provide a 20-year plan every five years to assess system needs and plan for changing water usage. Water Master Plans include conservation, water quality, operations, system conditions, and computer modeling analyses and also aims to meet level of service, fire flow, and other regulatory requirements.

This plan helps policy makers balance the cost of improvements with risks to water service reliability.

## **Bend's Integrated Water System Master Plan (iWSMP)**

The City of Bend's Integrated Water System Master Plan (iWSMP) is the most comprehensive analysis ever done of the City's water system, providing a holistic view of its supply, capacity and condition. This gives the City the opportunity to identify cost efficiencies in the timing and scope of projects, implementation of conservation measures, and creation of additional operations and maintenance activities.

### **It will also help the City:**

- ✓ Modernize, maintain, and replace aging parts of the system
- ✓ Prepare for changing climate conditions and improve the system's resiliency against periods of drought and the risk of wildfires
- ✓ Prioritize investments that come out of this project through a detailed evaluation of risk factors and potential impacts
- ✓ Allocate limited resources to priority projects and initiatives
- ✓ Build infrastructure at the right time and the right places by monitoring demand triggers
- ✓ Model conservation scenarios to apply to cost-benefit analyses



**ASSESS** existing facilities  
(pipes, pumps, reservoirs, wells, etc.)

**COMPARE** different scenarios incorporating  
future demands, condition, risk, conservation

**IDENTIFY** optimal list of improvements to  
address new and existing maintenance needs,  
and program requests

**PRIORITIZE** improvements over 20 years into a  
Capital Improvement Program so the City can  
continue to provide reliable service to customers

**ANALYZE** funding options and rates to  
pay for improvements

## **Coordinated and Responsible Planning**

Historically, engineers, water operators, and water resources staff have implemented projects and programs for the benefit of water customers. The iWSMP brings together these different groups of experts in a coordinated and efficient approach to infrastructure management, resulting in a preliminary Capital Improvement Program (CIP). The iWSMP will be used in a financial analysis that will help the City identify the most effective and affordable way to pay for improvements.

