

CITY OF BEND WATER MANAGEMENT & CONSERVATION PLAN

Bend has had an approved WMCP since 1998. It must be updated every ten years, and progress reports must be filed with the state every five years. A Water Management and Conservation Plan (WMCP) is a legal requirement of several water rights owned by the City, and the plan must be approved by the Oregon Water Resources Department. The WMCP helps the City develop water efficiency programs and policies to ensure sustainable use of water into the future. Updating the WMCP with the Integrated Water System Master Plan made sense since they share common information. This allowed the City to look at additional conservation measures and determine which ones have the potential to reduce millions of dollars in future water infrastructure costs by delaying or eliminating the need for additional water supplies.

For more information, visit bendoregon.gov/water-system-planning.

Bend's Water Management and Conservation Plan



What went into the Conservation Analysis?

As part of the work done for the Integrated Water System Master Plan (iWSMP), future water demands were forecasted using many different factors including population, land use, irrigation demand information, water pressures, safe flow velocities, fire protection flows and water storage needs.

Water Savings Opportunities for Bend

Bend has two main sources of water. The year-round base supply uses surface water from the Bend Municipal Watershed. In order to meet the peak summer demands added by outdoor landscape irrigation, water is pumped from the Deschutes Regional Aquifer. In Bend, 60% of the our annual water is used for irrigating landscapes outdoors.

Where and How to Reduce Demands - Where is Water Used and by Who?

Understanding where and how the current and future customers use water is key to identifying effective and affordable conservation measures. Data clearly shows that single-family homes and commercial customers use a lot of water in the summer due to the demands from outdoor irrigation.

It makes sense then to focus on programs, incentives, and education that promote outdoor water use efficiency. Some of the City's most successful initiatives

include the sprinkler inspection program, large landscape program, and contractor education. The largest opportunity for saving water indoors comes from installation and use of the new, high efficiency toilets. Toilet use alone typically accounts for 24% of indoor use.

Outdoor

1.959 MG

Indoor

1,307 MG

During the 2020 WMCP process, the City looked at hundreds of potential water conservation measures, and narrowed it down to 11 measures with the highest indoor/outdoor water savings.

Adding Conservation Measures Shows Cost Savings Potential of Over \$20 Million Dollars

Eleven new and existing conservation measures were selected for detailed cost benefit analysis. Initial modeling and analysis results show that by implementing these proposed measures, Bend can avoid over \$20 million dollars of capital spending by eliminating the need to build three new wells and one large new reservoir. The proposed conservation measures come with an estimated cost of approximately \$11 million over 20 years to implement, bringing the net savings of approximately \$10 million. Additional savings would come from not having to operate these new facilities, maintenance costs or eventual complete replacement too, so conservation does pay off in the long run!

