

1. Ashland is 12 miles north of the California border, in SW Oregon. Population 21,630 (2007), temperate climate, 19 inches of rainfall annually. There is a transient population: Southern Oregon University has around 5,000 students, and the Oregon Shakespeare Festival attracts tourists from March through October.
2. Our water comes from the Mt. Ashland watershed (Siskiyou Mountains). Users are only residential and commercial. Major pollutant at this time is temperature – treatment plant produces effluent too warm.
3. The City of Ashland provides the drinking water – source is Reeder Reservoir, located in the Ashland watershed. Water comes from snowmelt, is collected at the reservoir and piped to residents and businesses. Private wells in the city are scarce and unknown. In summer months, extra water may be collected from the Talent Irrigation District system, and then treated. (Our discussion is “why are we treating water so people can put it on their lawn?”) Ashland uses 2 million gallons a day in the winter; 7 million gallons a day during irrigation season.

4. **Stormwater** goes directly into Bear Creek, eventually into the Rogue River.

The water system: The distribution system in Ashland includes over 70 miles of water lines, 5 pump stations, 29 pressure reducing stations, 925 fire hydrants, and over 6700 individual services and meters.

The **Water Treatment Plant** treats up to 7 million gallons of water per day and personnel are responsible for ensuring the water is treated to meet drinking water standards

The City of Ashland's wastewater treatment plant operates as a secondary treatment system for five months (December 1-April 30), and as a tertiary system the remaining seven months (May 1- November 30). Both processes discharge into Ashland Creek approximately 1/4 of a mile above the confluence of Bear Creek.

The City of Ashland's Wastewater Treatment Plant uses a biological nutrient removal (BNR) process to treat wastewater. In a biological process, oxygen is dissolved into the wastewater to drive the treatment process. In order to prevent an excessive amount of particle accumulation in the membrane, a backpulse pump is periodically used to reverse the flow and dislodge these trapped particles. This reject water is pumped back through the secondary treatment process. Typically, laboratory results on the membrane system shows a non-detect for total phosphorus and e-coli (Pathogens). The CBOD and TSS results are very near 100% removal also. As of May 2002 when the tertiary system was completed, the Ashland Wastewater Treatment Plant was the only plant in North America using this process. Both the secondary and Tertiary systems discharge an effluent that is well under regulatory standards as established in our National Pollutant Elimination Discharge System (NPDES) permit. The quality of the effluent that comes off the Tertiary system may offer us many different opportunities in the future for water reuse.

