

The Water System of Medford (and Other Towns)

By Dennis Powers

Whether for drinking, washing, or cleaning, having sufficient potable water is vital to living regardless of era. Ashland relies on Ashland Creek that's fed from the snow melt and watershed rain runoff from Mount Ashland. Cities such as Grants Pass rely on the Rogue River; living in an unincorporated area usually means depending on a well. Mt. McLoughlin is the water source for over 130,000 people today in Medford, Central Point, Eagle Point, Jacksonville, Phoenix, Talent, White City, and four rural water districts--all served by the Medford Water Commission.

Area residents first relied on wells for their water needs, but Medford in 1888 excavated a ditch from Bear Creek and built a storage tower as its first water system. Although a pumping station was added four years later, it was clear that Bear Creek water wasn't clean enough for use. It was dirty, foul, and so unusable--owing also to dumped sewage from Ashland to Phoenix--that some residents preferred whiskey and forgetting about bathing.

The question was whether Fish Lake or Big Butte water would be better. Unfortunately, the 31-mile pipeline from the Big Butte watershed would cost \$400,000. Since the 22-mile, gravity-fed system from Fish Lake would be considerably less expensive, this alternative won out. In 1910, the wooden-stave pipeline was constructed for \$254,000; but after the orchard-boom building frenzy of the 1910s and system inadequacies causing algae and near-putrid water (flowing in open flumes without filters or settling tanks), it became clear that Fish Lake was not working out. The city purchased the water rights at Big Butte Springs in 1915 for \$15,000 after enduring water shortages and contaminated supplies.

In 1922, the voters approved the five-member Medford Water Commission as a city charter amendment. Three years later, the Oregon Legislature granted Medford the rights to all of the unappropriated waters from Big Butte Creek and its tributaries. Given this, the city's voters approved a \$975,000 bond measure to build the 31-mile pipeline from Big Butte Springs to Medford's 10,000 residents. The commission decided to use high-quality steel coated inside and out with a very thin layer of a hot asphalt to prevent rust, instead of the unreliable wooden pipeline and flumes. On July 1, 1927, the 2-foot diameter pipeline began carrying water by gravity flow to the city.

The snowmelt on Mt. McLoughlin (9,494-foot elevation) percolates through the porous, volcanic soils to emerge again at Big Butte Springs (2,700-foot elevation) near the town of Butte Falls. The watershed consists of 56,000 acres of private and publicly-managed land with 75% managed by the U.S. Forest Service. The springs discharge high quality water that is consistently cold, clear, and low in mineral content. Collected underground, the spring flows require only minimal treatment for disinfection in meeting current water-quality standards. Consequently, the slogan of "A mountain spring in every home" came about to note the purity of the city's water.

The Medford Water Commission in 1952 completed a 52-foot high, earth-fill dam of the Big Butte Springs water that created Willow Lake and stores the waters of Willow Creek,

a tributary of the South Fork of Big Butte Creek. On land owned by the county, Jackson County developed the Willow Lake Recreation Area. There are facilities for camping, overnight stays, picnicking, and fishing with a paved boat ramp and a small, private resort located on the shore. Covering some 925 acres, the lake has nearly 4-1/2 miles of lake frontage.

Over the years, the commission signed agreements with the surrounding cities mentioned above to provide water to them. In 1952, a second pipeline from Big Butte Springs was built with the dam construction, and ten years later, chlorine added when bacteria traces were discovered in the water. The commission also obtained water rights to the Rogue River to supplement its needs during the higher requirement months of May to September. Built in 1968, the Robert A. Duff treatment plant near TouVelle State Park draws the Rogue River water.

The two, original pipelines still carry the important water, and the commission maintains the entire pipeline, including repairing small sections when needed. The question is still out as to when this 85-year-old-plus system will need to be replaced. For now, when the great majority of Jackson County residents turn on their faucets, they are drinking Big Butte Springs water from Mt. McLoughlin.

Sources: “How Does Medford Get its Water?,” *Mail Tribune*, April 22, 2007, at [Medford \(and other Towns\) Water Source](#); Bill Miller, “From worst to first: The history of the City’s water system,” *Mail Tribune*, May 31, 2009, at [History of System](#); “Medford Water Commission: Big Butte Springs” at [Big Butte Springs](#); Damian Mann, “Pouring it on,” *Mail Tribune*, March 12, 2013, at [Other Towns](#); Damian Mann, “Good to the Last Drop,” *Mail Tribune*, April 14, 2013 at [Additional Background](#); “Atlas of Oregon Lakes: Willow Lake (Jackson County),” at [Willow Lake](#).