History of Dillon's Water System

Presented by Bob Cottom for the Dillon Rotary 12-13-06

On January 7, 1903 a bond issue for \$65,000.00 was voted in to build a settling pond and a 1,000 gallon reservoir and to lay 8 Miles of wooden water line to bring water from the Rattlesnake Creek.

In 1905 and 1907 there were two 210,000 gallon reservoirs built that gave the City a total of 420,000 gallons of water storage and shortly after there was chlorine added to the water.

In 1924 the Water Department started replacing the old wood water lines and by 1959 all the wood water line was replaced in the City of Dillon.

In 1948 the first well was drilled, producing 500 GPM. Soon after the well was put into production, the winter got so cold that the service lines were freezing all over town. Someone suggested that the well should be turned on, as the ground water was 42 degrees compared to the Rattlesnake water of 32 degrees or less. When the water was warmed up, the freezing of pipes stopped.

In 1951 another bond issue was voted in for a 340,000 gallon storage tank, and in 1962 the second well was drilled at 500 GPM. In 1963 another well was drilled at 1,000 GPM and in 1973 the fourth well was drilled for 500 GPM, giving us a total of 2,500 GPM of pumped water. With the 1,000 GPM from the Rattlesnake Creek, Dillon had 3,500 GPM or 5 million gallons of water a day.

January 16, 1986 turn off the water to the old round reservoir, which was leaking badly out of the side of the wall. That took care of 340,000 gallons of storage which left the city with only 410,000 gallons for ten years until there was a new one build on the Eastside of town.

The water pressure in town coming from the square reservoir was 98 PSI. In 1987 there was two pressure reducing valves installed in the valve house at the river to reduce the pressure and to control the amount of water used in town, because we could not keep up with the demand.

July 1, 1993 the Clean Water Act mandated that all surface water sources be treated and filtered. The City Council felt that the filter system cost too much and decided to not use the Rattlesnake Creek water except in the case of an emergency. The Water Department went to all ground water on July 1, 1993. All of the wells are treated with sodium hypochlorite for disinfection.

In 1996 there was a new water line run from Montana Street, on Noble, to Oliver Lane and across the field and up to John Erb's property to the new 750,000 gallon reservoir, then back down by the College on to Atlantic Street. In 2007 the College is going to run an 8" water line from the new water line in Erb's field to the existing 6" water line on college property. This will give the College more water pressure and help with water flow on the East side.

In 2001 there was a new one million gallon reservoir built on the West side of town. Plus, a generator was purchased that can operate any pump at the operator's choice.

In 2004 there was new 21" sewer line installed running from the lagoon up Noble Street and Oliver Lane to the rest home. This new sewer line picks up all the East side of town and took a big load off of the 18" sewer line on Montana Street going to the lagoon. This was a dream of my dad, Mayor Cottom and Water Commissioner Rodger Pierce, and fulfilled by Mayor Marty Malesich.

Also in 2004, on Montana Street from Helena Street to Super 8, there was water and sewer installed to give sewer service and water to anyone that needs it on the West side of Montana Street. From Noble Street going North to Overland Street, there was water and sewer put in for any development in the future.

In 2006 there was sewer run to all of the residents on Thomsen Avenue, Kentucky Avenue and Barnett Avenue from Chestnut Street to Oliver Lane. This allowed all of the people in this area to be taken off of septic tanks. This was paid for with a grant.

In 1915 a shortage of water occurred so that at no time was there sufficient storage in the reservoirs for fire protection. It was computed, at that time, the average water consumption in Dillon was about 342 gallons per capita per day. The national average now is 100 gallons per capita per day. In 1915 there were water meters installed in 75% of the services. This reduces the consumption to a

large extent and makes it possible to keep the reservoirs full. All of the resident's services are metered at this time.

In 1997 the Water Department started a new billing system, billing monthly instead of quarterly. With different meters all that needs to be done is touch a pad on the side of the house and the meter read is entered in the hand held computer. There were about 400 of these meters installed. These now have radio reads. After Montana Power went to AMR meters (automatic meter read) people started locking their gates and the dog population seemed to increase, which was making it difficult to read meters.

In January of 2002 the Water Department started looking into AMR to make meter reading more efficient, plus there is approximately 1450 meters that are over 20 years old that need to be changed out. These are slow running meters that don't record low flows, which create a loss of revenue. The Water Department is 70% complete with the change out to new meters. We are now reading all the meters in 16 man hours instead of two weeks the old way. I'm hoping to have 90% of all the residents changed to radio reads by spring.

In 2001 the Water Department started a leak detection program and the first year there were 19 leaks detected totaling a loss of 230,000 gallons per day of water or 84 million gallons a year. In the second year, 2002, of the leak detection program, 12 leaks were found for a total of 155 thousand GPD or 56 million gallons a year. Only 3 of these leaks were on the main water line, with the rest being either fire hydrants or on service lines for the water meters.

In 2006 there was one leak on the main line and 4 service line leaks.

When the new 750,000 and 1 million gallon reservoirs were put on line and the old ones removed the water consumption dropped dramatically, as did the electric bills.

The Water Department is replacing all the old Ludlow fire hydrants with new Muller fire hydrants.

The Water Department's next biggest concern is John Erb's subdivision south of the Forest Service and east of Highway 91, not so much the water, but the sewer line. I will lease a flow meter to see how much flow there is in the sewer line in the ally between South Atlantic and South Pacific Streets. This will help the city determine how many more hook-ups can be placed on this sewer line.

The Dillon Water Department has three operators that are fully certified in water and wastewater by the State of Montana that are on call 24/7 by calling the Police Department at 683-3701 to get help for any water or sewer problem.

Mayor Malesich, the City Council and the Dillon Water/Sewer Department's constant goal is to provide you with a safe and dependable supply of drinking water and a safe and efficient sewer system. We want you to understand the efforts we make to continually improve the water treatment process and the sewage treatment system to protect our water resources.

On December 9th of 2010 Bob Cottom retired from the water department with 34 years and 6 months of service to the City of Dillon.