La Mesa Water Cooperative

WaterGram - July 2014

Coop Faces Short Term and Long Term Water Supply Challenges and Costs

The Coop faces both short term and long term challenges to our water supply. Over the last year water levels dropped quicker than expected in our newest well (#6). As a result we have had to lower the pump. At the same time that water levels are dropping (probably from the continued drought) we have seen rising arsenic levels in our oldest well (#2) and in #6.

Well #2

- Arsenic levels were stable at this well for many years, but began to increase in 2012. Late last summer the New Mexico Environment Department notified us that this well was in violation of Federal standards because the arsenic level exceeded 10 ppb (parts per billion). In response to this violation, we immediately took the well out of service and increased arsenic monitoring at our other wells. You were notified of these actions in the October 2013 WaterGram.
- This well, which only produced 10% of our water, will remain out of service until the Board decides what, if anything, to do.

Well #6

- This is the well we drilled in 2012 to replace well #1 that had reached the end of its useful life. Well #6 was drilled close to #1 and we expected that it would have similarly low level of arsenic.
- Initial arsenic levels were variable and higher than expected. Consequently, we planned to install arsenic treatment facilities at a later date. Because subsequent testing indicated that the arsenic level was dropping, these plans were delayed. Since this drop, arsenic levels have again increased. We now have received two tests indicating arsenic levels that exceed 10 ppb. If tests exceed this level for one year, we would be considered in violation of Federal standards. Because the trend is not encouraging, the Board will install arsenic treatment facilities as soon as possible. Pilot testing of treatment processes is planned to start in July 2014.
- Current plans are to order the equipment in late summer, install it over the winter, and have it operational in the spring of 2015.
- The funds to purchase and install this equipment are on hand and the expenditure will not immediately impact water rates. However, we will not be able to estimate the cost to operate the equipment until our pilot tests are completed. The Pricing Committee (see below) will determine if a rate adjustment is needed to cover operating costs.

Need for more redundancy in system

A common recommendation is that water systems should have enough capacity to satisfy peak water demands with their most productive well out of service.

- We are not able to meet this guideline.
- At the present time we are operating with two wells (5 & 6), and we need both to meet peak demands, with some reserve capacity. Well #6 produces roughly half as much water as #5, and it could not meet peak demands.
- Over the next few years we probably need a new source of water. Our choices are drilling a new well or treating the water from well #3 for arsenic. Both options will be expensive. Either a new well or arsenic treatment at well #3 would have an initial cost of over $1000 per member. In addition, both would have ongoing operational costs.
- We could use well #3 in an emergency, recognizing that it exceeds the Federal arsenic limit.

Board actions to address these problems

- The Water Supply Committee has been asked to study our needs for additional redundancy, investigate the advantages and disadvantages of drilling a new well or treating #3, and determine when the new source should go into service. We expect to receive their recommendations by fall.
- As soon as the Board acts on the recommendations of the Water Supply Committee, the Pricing Committee will be asked to study the implications of these actions and determine what, if any, adjustments in rates are indicated. Normally, rate changes go into effect on January 1.