

## Executive Summary

In 1988 The Rockhouse Mountain Property Owners Association entered into an agreement with The Village District of Edelweiss to take over the Conway section of the water system, which at that time consisted of 2" pipes in the streets, A 30,000 gallon storage tank, a mid system pumping station, but no water sources. The agreement with the Village District called for the RMPOA to purchase water from the Village District for up to two years until we could obtain our own water sources.

In 1991 We drilled a 1171 ft. #1 bedrock well on land to which we had gained an easement. In 2001 we added the #2 1205 ft bedrock well in the same easement area and a 12,000 gallon storage tank, that replaced the existing tank, making the system fully gravity fed. In 2004 we replaced a substantial section of 2" main with 6" main at a cost of \$88,000 dollars. In 2005 we replaced another section of 2" line with 6" line at a cost of \$70,000 dollars and in 2006 we completed another section of 2" line replacement at a cost of \$83,000.00. In 2008 we installed an additional 20,000 gallon storage tank at a cost of \$50,000 dollars. In the spring of 2010 we met with the water division hydrologist, to evaluate other potential sites that were not in the existing easement area and were not bedrock wells.

In late June 2010, for the second time in 6 months we experience a substantial drop-off in production of the # 2 well. That coupled with a heavy summer weekend demand that drained our 30,000 gallons of storage, forced us to request emergency approval to drill a third bedrock well in the existing easement area, # 3 well at 750' which is currently operating under interim approval. We are currently operating under a Letter of Deficiency as to source capacity.

There are currently 100 houses actively using the Rockhouse system. Of those 55 are full time homes with 45 vacation homes. Average usage varies both by season and by day of the week. Heaviest demand occurs from May through September, and on weekends. There are substantial up-ticks in usage at Christmas, New Years, Martin Luther King Weekend, February school vacation and Columbus Day. Average week day usage varies for 10,000 to 14,000 gallons per day. Weekend and holiday usage can increase the demand by as much as 6,000 to 10,000 gallons. There is a potential for 60 additional homes at build-out.

Using our high side average daily usage mid week for 55 homes, the per home usage is 255 gallons per day. Using this figure and assuming that all homes become full time, at build out, we would expect a daily requirement of 40,800 gallons per day. This would require wells that could produce at least 30 gallons per minute on a sustained basis. The current Rockhouse wells are of uncertain sustainable yields, those yields will need to be re-established but it is clear that Rockhouse Mountain will need at least 1 additional well to meet future needs

The proposed project would use expert consultants to evaluate the existing bedrock wells as to sustainable yield, and future production. Using consulting Hydrologists we would evaluate several potential sites for the location of a new well(s). Once the site is established we would 1. acquire access by purchase or easement, 2. drill the well(s), 3. Design the means to move water into the existing system for optimal operation. 4. Construct the delivery systems. 5 Complete the DES process for approval.