

September 17, 2015

To: Board Members

Subject: Submission of Water Development Projects

Back in June of this year Standard Form 2015-1 was sent out to all community members. This form was to be used to suggest additional sources of water for development to aid the depleting aquifer in the Cedar Valley. 3 submissions of projects were made by community members and 5 submissions were put together by CICWCD staff.

Once the submissions were received, meetings with experts in their fields were arranged and each of the submissions were evaluated. The experts that helped in evaluating these projects included the following:

Phil Gardner USGS

Kerry Carpenter Retired from the State Engineers office

Russ Hadley Division of Water Resources

Hugh Hurlow UGS

Russ Barris Division of Water Resources

Dan Aubrey Division of Water Resources

The attached packet includes the original submission as well as the discussions with these experts about their thoughts on each of the projects. The discussions on each of the projects were very informative to the staff as they helped us too understand the direction that will most benefit the aquifer here in our valley. The consensus of the group had the following as the preferred projects to provide the 50 year water future of the valley.

1. West Desert pipeline
 - a. This project is the only project that will provide a long term sustainable water resource for the valley. This was seen by all that it is a necessary project for the long term good of the aquifer and the viability of the Cedar Basin.
2. Aquifer Recharge
 - a. This project is an encouraged effort by the State and is a good way of helping to replenish the aquifer. It will benefit the aquifer by not allowing water to evaporate from Quichapa Lake.
3. Aquifer Balance
 - a. The balance project is a good way of spreading the demand on the aquifer and would help in aquifer depletion in certain areas but would not be a new source of water therefore the balance of cost versus aquifer damage should be weighed in doing this project.

4. ARCO Well Three Peaks
 - a. This project was discussed as a good way of doing research. The access to a deep well that could be tested all the way to 10,000 feet deep would provide a good basis for additional research. The well itself is quite small in diameter so in order to extract the water that is proposed a replacement well would need to be drilled with a larger diameter. Concerns over the water availability for a sustainable source were expressed. This formation is believed to be connected to the basin fill aquifer.
5. Quichapa Creek Well
 - a. The Quichapa Creek well is believed to be in a formation that is connected to the Cedar Basin fill aquifer so extracting water from this location if it was found deeper would just be pumping it out in another location before it arrives in the valley fill aquifer.
6. Cretaceous Well at Shepherders Cabin
 - a. Concerns over where the water is currently going were expressed. It was stated that withdrawing water from this location would most likely affect springs in the area. The water rights transfer would be very expensive and very difficult to accomplish since it would be require a transfer of the senior rights on coal creek and dry up the farms that utilize those rights now.
7. West Well
 - a. The West Well is viable for the mining operation if the mining operation comes back into being a customer. This should be done when demand is there.
8. Reservoir
 - a. The reservoir proposal at Winn Gap would be an expensive and higher hazard project. This would not likely be a feasible project because of those concerns.

If you would like to discuss or if you have questions about these proposals please contact Paul or Kelly to discuss them during the next couple weeks as you have a chance to evaluate them.