Central Iron County Water Conservancy District
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Chekshani Cliffs Water Improvement Proposal

Frequently Asked Questions March 3, 2020

1. **What is the water quality likely going to be like from the new well?**

	Total Disolved Solids (TDS)	Sulfate	Hardness	Nitrate as N	pH	Langlier Index	Magnesium	Calcium	Alkalinity-Total (as CaCO3)	Bicarbonate (HCO3)
EPA Max Contaminant Level	**1000**	**250**		**10**						
Chekshani Well	1627	891	1140	5.4	7.2	0.31	105	269	193	235
Well Near I-15	427	129	1020	ND*	7.76	0.04	70	177	135	135

*ND = Non-Detect

Result Explanation:

The proposed plan is to drill a new well close to the "Well Near I-15." This well site indicates that water will be significantly better among sampled analytes. There is nearly 4x (times) less TDS, 7x (times) less Sulfate, and 5x (times) less Nitrate. According to our research high levels of TDS, Nitrate and Sulfate can attribute to corrosion. Reducing these amounts will likely reduce the corrosive properties of your water and will be safer to consume.

However, the "Well Near I-15" had a similar amount of Hardness 1,020 ppm (59 grains) to 1,140 ppm (66 grains). This means residents would still likely utilize a water softener to remove the hard water at their home.

2. **Will the new well fix the water corrosion issues many are seeing?**
There is confidence that the water quality will be similar to the "Well Near I-15" and significantly better than the well currently supplying Chekshani Cliffs. However, we cannot guarantee that corrosion will stop. All indicators lead to high Sulfate and Total Dissolved Solids (TDS) as the reason for corrosion. After contacting dozens of labs throughout the State and United States to review the water chemistry at the Chekshani Well, no one could definitively identify the reason

for corrosion. In addition, it is likely that corrosion is currently occurring in your home and installing a new well or even a treatment plant will not reverse the damage which is or has occurred.

3. **Will I still need a treatment system in my home with the well?**
   The "Well Near I-15" had a similar amount of Hardness 1,020 ppm (59 grains) to 1,140 ppm (66 grains). This means residents would still likely utilize a water softener to remove the hard water at their home.
4. **Will I need a treatment system in my home if a Treatment Facility is installed?**
   No, you will not need a filtration or water softener in your home. The water will be pure. In fact, we will add back into the water some TDS between 50 – 100 ppm because it has been found that the water at that point is starved for minerals and could extract them from pipes and appliances if not addressed.
5. **What opportunities do I have to participate for or against the project?**
   a. **Initial Vote:** 51% of the lot owners within the area must vote for the project. Signature Ballots must be postmarked by **March 12th, 2020**. *We will accept emailed or hand delivered ballots by **March 18th by 5:00 pm.***
   b. **Public Meeting:** CICWCD Board Meeting (March 19th, 2020): Discuss ballot results and the probability of moving forward.
   c. **Public Notice Period** of Public Hearing: Letters are sent to all proposed property owners and there will notices published for 4 weeks in the newspaper and on the State Public Notice Website.
   d. **Public Hearing** (April 16th, 2020): This will be a formal opportunity for comments and will begin the 60-day protest period.
   e. **Protest Period:** (April 16th – June 16th, 2020) Written protests can be filed with CICWCD. <u>If 40% of the assessment area protests</u> the improvement, the project will not go forward.
   f. **Public Meeting:** CICWCD Board Meeting (June 18th, 2020): Discuss protest tally and determine a Resolution to establish Assessment Area **<u>or</u>** abandon the proposal.
6. **Is there a requirement for a redundant well or secondary source?**
   The State has encouraged us to "evaluate if there are other reliable supplies of a better source of water that is available: considering quality and quantity and economic or institutional constraints". The State requires a secondary source for 100 connections or more. However, the CICWCD Board does not want to be in an emergency situation where they cannot supply water to the subdivision because the source has failed. We are to provide water for perpetuity, not simply the next 5-10 years. Our legislative mandate under the Utah Water Conservancy District Act is to look 50 years into the future and ensure water resources will be available to the residents in our District. Therefore, the District is paying for half of the well and adding additional capacity**.**
7. **Can lot owners revise their initial signature ballot vote after receiving more information?**
   Yes, ballots are available on our website (cicwcd.org/chekshani-cliffs/) and in our office. Please make sure to fill out the ballot that has "For Revised Votes" in the title so that votes are not counted twice. *Ballots must be postmarked by March 12th, 2020, or we will accept emailed or hand delivered ballots by March 18th by 5:00 pm.*

8. **How much will it cost for a New Well vs. New Well and Treatment?**

Option 1a: New Well (Private)			
	Project Cost	**Chekshani Contribution**	**District Contribution**
New Well	$225,000	$112,500	$112,500
Line to Chekshani	$223,000	$111,500	$111,500
Totals:	**$448,000**	**$224,000**	**$224,000**
Possible Grant Funding		30%	30%
Overhead Cost		$ 4,200	
Grand Total:		**$161,000**	**$156,800**
	Project Cost per Lot:	**$ 2,300**	
Improvement Cost/Lot/Month 5% 10 yrs:		$24.40	
Current Average Monthly Bill:		$40.86	
Total Average Monthly cost/lot/month:		**$65.26**	

Option 2: New Well (Private) & Treatment Facility			
	Project Cost	**Chekshani Contribution**	**District Cost**
New Well	$225,000	$112,500	$112,500
Line to Chekshani	$223,000	$111,500	$111,500
Treatment Facility	$400,000	$400,000	
Totals:	**$848,000**	**$624,000**	**$224,000**
Possible Grant Funding		30%	30%
Overhead Cost		$4,200	
Grand Total:		**$ 441,000**	**$ 156,800**
	Project Cost per Lot:	**$ 6,300**	
Improvement Cost/Lot/Month 5% 10 yrs:		$66.82	
Current Average Monthly Bill:		$40.86	
Treatment O & M Costs (monthly):		$13.69	
Total Average Monthly cost/lot/month:		**$121.37**	

9. **Can the rate be adjusted for the O&M cost to be shared appropriately to those who use more water?**

   Yes, we recently calculated this and determined that it is likely the appropriate way to charge for the O&M costs. The chart above which has been shared at the meeting and other documents shows a $13.69 per month per lot expense. To attribute O&M to water use requires an estimated $1.90 increase per each 1,000 gallons of water used, or equivalent to about $20.00 per month per connection. This is $6.31 more than the $13.69 shown because not all lots have houses on them and will not be using water.