Chekshani Cliffs Water Improvements
Results Near Kanarraville
CICWCD Chekshani Well

TDS Results:

<table>
<thead>
<tr>
<th>CHEKSHANI</th>
<th>EPA MAX CONTAMINANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1604</td>
<td>1000</td>
</tr>
</tbody>
</table>
Holt Well (Near I-15)

TDS Results:

<table>
<thead>
<tr>
<th></th>
<th>HOLT WELL (I-15)</th>
<th>CHEKSHANI</th>
<th>EPA MAX CONTAMINANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>432</td>
<td>1604</td>
<td>1000</td>
</tr>
</tbody>
</table>
Holt Well (West of U.S. 91)

TDS Results:

- Holt Well (US 91): 509
- Chekshani: 1604
- EPA Max Contaminant: 1000
Big Trees Well

TDS Results:

- Big Trees Well: 1240
- Chekshani: 1604
- EPA Max Contaminant: 1000
Camp Creek

TDS Results:

- Camp Creek: 1080
- Chekshani: 1604
- EPA Max Contaminant: 1000
Carter Well

TDS Results:

CARTER WELL  CHEKSHANI  EPA MAX CONTAMINANT

1100  1604  1000
Kanarraville Rest Area

TDS Results:

- **KANARRAVILLE REST AREA**: 400
- **CHEKSHANI**: 1604
- **EPA MAX CONTAMINANT**: 1000
Rock Bumpers Factory

TDS Results:

<table>
<thead>
<tr>
<th></th>
<th>Factory</th>
<th>Chekshani</th>
<th>EPA Max Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>750</td>
<td>1604</td>
<td>1000</td>
</tr>
</tbody>
</table>
TDS Results
Lund Home (Kanarraville)
Lamb Home (Kanarraville)

TDS Results:

- Lamb Home: 550
- Chekshani: 1604
- EPA Max: 1000

CONTAMINANT
Kanarraville Town Well

TDS Results:

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>KANARRAVILLE TOWN</td>
<td>650</td>
</tr>
<tr>
<td>CHEKSHANI</td>
<td>1604</td>
</tr>
<tr>
<td>EPA MAX CONTAMINANT</td>
<td>1000</td>
</tr>
</tbody>
</table>
400 N 1200 W (Kanarraville)

TDS Results:

- 376
- 1000
- 1604
Kanarraville Springs

TDS Results:

<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>EPA MAX</th>
<th>CHEKSHANI</th>
<th>KANARRA SPRINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1604</td>
<td>415</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1000</td>
</tr>
</tbody>
</table>
789 S Hwy 91

TDS Results:

- 1502
- 1604
- 1000

789 S HWY 91  | CHEKSHANI  | EPA MAX CONTAMINANT
385 W Center St. (Kanarra)

TDS Results:

- 385 W CENTER: 495
- CHEKSHANI: 1604
- EPA MAX CONTAMINANT: 1000
Water Quality Analysis

• 15 wells within the region were sampled to identify the best location to drill a new well.

• CICWCD worked with landowners near Kanarraville (proposed #2 Larson Well) to look at the possibility of drilling a well close to Kanarra. This would provide a dual-purpose line, both from the well and an interconnection between the two communities as an emergency source.

• Ultimately, based on sampling, “Proposed New Well Site 1” (near I-15) was identified as the best location to drill a new well.
Three Proposed Solutions

- Drill a new well in a different location
- Drill a new well AND install a treatment facility
- Simply do nothing
Why Drill a New Well?

Water Chemistry of the current well is not satisfactory

A redundant source is needed

Age of current well

Drilled 1991
Why Install a Treatment Facility?

Current water chemistry

Treatment Facility would be able to treat multiple wells

Culligan is confident that this will lower future corrosion
The CICWCD Board of Directors suggests drilling a new well for the Chekshani Cliffs Subdivision.
Total Project Cost Estimates

New Well (District Drill) $748,000
New Well (Private) $448,000
New Well (Private) + Treatment $848,000
Chekshani Contribution Cost Estimates (with 30% grant)

- New Well (District Drill): $266,000
- New Well (Private): $161,000
- New Well (Private) + Treatment: $441,000
### Option 1: New Well (District Drill)

<table>
<thead>
<tr>
<th></th>
<th>Project Cost</th>
<th>Chekshani Contribution</th>
<th>District Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Well</td>
<td>525,000</td>
<td>262,500</td>
<td>262,500</td>
</tr>
<tr>
<td>Line to Chekshani</td>
<td>223,000</td>
<td>111,500</td>
<td>111,500</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td>$748,000</td>
<td>$374,000</td>
<td>$374,000</td>
</tr>
<tr>
<td>Possible Grant Funding</td>
<td>30%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Overhead Cost</td>
<td>4,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
<td>$266,000</td>
<td>$261,800</td>
<td></td>
</tr>
</tbody>
</table>

- **Project Cost per Lot:** $3,800
- Improvement Cost/Lot/Month 5% 10 yrs (if financed): $40.30
- Current Average Monthly Bill: $40.86
- **Total Average Monthly cost/lot/month (if financed):** $81.16
Option 1a: New Well (Private)

<table>
<thead>
<tr>
<th>Project Cost</th>
<th>Chekshani Contribution</th>
<th>District Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Well</td>
<td>225,000</td>
<td>112,500</td>
</tr>
<tr>
<td>Line to Chekshani</td>
<td>223,000</td>
<td>111,500</td>
</tr>
<tr>
<td>Totals:</td>
<td>$448,000</td>
<td>$224,000</td>
</tr>
</tbody>
</table>

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 (if financed)

Current Average Monthly Bill: $40.86

Total Average Monthly cost/lot/month: $65.26 (if financed)
### Option 2: New Well (Private) & Treatment Facility

<table>
<thead>
<tr>
<th></th>
<th>Project Cost</th>
<th>Chekshani Contribution</th>
<th>District Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Well</td>
<td>225,000</td>
<td>112,500</td>
<td>112,500</td>
</tr>
<tr>
<td>Line to Chekshani</td>
<td>223,000</td>
<td>111,500</td>
<td>111,500</td>
</tr>
<tr>
<td>Treatment Facility</td>
<td>400,000</td>
<td>400,000</td>
<td></td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>$848,000</strong></td>
<td><strong>$624,000</strong></td>
<td><strong>$224,000</strong></td>
</tr>
<tr>
<td>Possible Grant Funding</td>
<td></td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Overhead Cost</td>
<td>4,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
<td><strong>$441,000</strong></td>
<td><strong>$156,800</strong></td>
<td></td>
</tr>
<tr>
<td>Project Cost per Lot:</td>
<td></td>
<td><strong>$6,300</strong></td>
<td></td>
</tr>
</tbody>
</table>

- Improvement Cost/Lot/Month 5% 10 yrs: (if financed) $66.82
- Current Average Monthly Bill: $40.86
- Treatment O & M Costs (monthly): $13.69

**Total Average Monthly cost/lot/month (if financed): $121.37**
Cost Comparison (for Chekshani Customers)

- **Monthly Cost per Lot**
  - New Well (District Drill): $81.16
  - New Well (Private): $65.26
  - New Well (Private) & Treatment Facility: $121.37

- **Capital Cost per Lot**
  - New Well (District Drill): 3,800
  - New Well (Private): 2,300
  - New Well (Private) & Treatment Facility: 6,300
Assessment Area Process: (complete)
Utah Code §11-42

Preliminary Discussion
- Improvement.
- Area Boundary.
- Probable participants.
- Method of Assessment.
- Financing Term.

Evidence of Sufficient Support
- Initial indication of majority interest.
- Ballots received in January 2019 with 66% voting to proceed.

Engineer’s Estimates of Possible Solutions
- Request of Proposal for Treatment Facility.
- Regional water quality sampling
- Cost Estimates.
Assessment Area Process:
Utah Code §11-42

Prep & Submittal of Application
- Signatures of majority in proposed area.
- Signature Ballots must be received by March 12th, 2020.

- Discuss ballot results and the probability of moving forward.

Notice Period
- 4 weeks published in newspaper and posted to State Public Notice Website.
- Letters sent to all proposed property owners.
Assessment Area Process:
Utah Code §11-42

Public Hearing on April 16\textsuperscript{th}, 2020
- Formal opportunity for comments.
- Begins 60-day protest period.

Protest Period
- Written protests can be filed with CICWCD.
- If 40% protest improvements, project will not go forward.

Board Meeting on June 18\textsuperscript{th}, 2020
- Discuss Protest Tally.
- Determination on resolution to establish Assessment Area or abandon the proposal.
Thank You!