Board Meeting Minutes

Wednesday January 25, 2023 @ 6:00 P.M.
102 West Forest Street
Brigham City, UT 84302

In Attendance: Vice Chairman David Forsgren, Financial Chairman Charles Holmgren, Board Members Jay Capener, Dennis Bott, Brodie Calder, Lyle Holmgren, Brodie Calder, Mark Larson, Joe Summers, Richard Day, Tim Munns, Boyd Bingham

Staff: General Manager Carl Mackley, Assistant General Manager Jeff Humphrey, Systems Operations Chance Baxter, Administrative Assistant Keely Draper

Other: Jared Richens & Bryan Phinney – Keller Associates
Members of the General Public, that signed the roll.

Vice Chairman David Forsgren:
Welcome
Invocation: Jay Capener
Pledge of Allegiance: Chance Baxter
Declaration of Conflicts of Interest: Brodie Calder stated that he may have a conflict of interest if the Board takes any action in Beaver Dam. Brodie owns property in Beaver Dam and he has requested water from the Conservancy District. He stated that he would refrain from voting on anything in regards to Beaver Dam. General Manager Mackley responded that today's meeting will be informational only. No voting.

Adoption of the Agenda
A motion was made by DJ Bott to approve the agenda. The motion was seconded by Tim Munns. The motion passed unanimously.

Approval of the Minutes for the Board Meeting held December 14, 2022
The minutes of the Board Meeting held December 14, 2022 were included with the packet that was provided to the Board Members.

Board Member Bott made a motion to approve the minutes of the meeting held December 14, 2022 *with one clarification and one correction; Board Member Larson asked about the correction of the prior minutes on the vote by J. Capener voted against the motion to approve the tentative budget. There was agreement by the board that this was just a correction of said vote. Board Member Larson noted an error in prior meeting transcription on page 12, first paragraph change "one* ***tailored*** *generator" to "one* ***trailered*** *generator"*. The motion was seconded by Richard Day. The motion passed unanimously.

Financial Chairman Charles Holmgren – Financial Business
The financial statements for December 2022 were prepared and provided to the Board Members. Financial Chairman Holmgren has reviewed the reports and asked for the Board to approve them.

A motion was made by Mark Larson and was seconded by Richard Day. All members voted in favor.

Swearing in of new Board Members by Keely Draper, Notary Public
New Board Members: Boyd Bingham, Brodie Calder, Lyle Holmgren and Tim Munns were sworn-in by Keely Draper.

Elections of Officers of Board of Trustees by Dave Forsgren, Vice Chairman

Nomination of Dave Forsgren for Chairman by way of a motion by Board Member Richard Day Seconded by Board Member Lyle Holmgren. Financial Chairman Charles Holmgren then made a motion that nominations cease for Chairman. There was an unknown second to the motion. Tim Munns stated that the rules were suspended to put Vice Chairman Forsgren in as Chairman by acclamation. A vote was taken. All voted in favor. No one opposed.

Now appointed, Chairman Dave Forsgren asked for nominations to appoint a Vice-Chairman.

Board Member DJ Bott was nominated by Jay Capener. The nomination was seconded by Brodie Calder. Board Member Richard Day was then nominated by Chairman Forsgren. The nomination was seconded by Tim Munns. Paper votes were then made by each board member and counted by Keely Draper. Results were 6 votes for Dennis (DJ) Bott and 5 votes for Richard Day. DJ Bott is the new Vice Chairman.

Update of Purchase Order Policy
Purchase order policy adoption changing incidental costs for $100 to $250.

Motion to Approve by Mark Larson, Seconded by Tim Munns. No opposed.

Beaver Dam/Collinston Water Supply Presentation by Jared Richens with Keller Associates
Jared shared the attached slides and gave a presentation regarding them:

SEE ATTACHED PRESENTATION SLIDES

The public was told that there would not be public comment or questions entertained at this meeting and was asked to hold their questions and comments regarding this presentation until after the board meeting and they could address their questions, comments, or concerns to General Manager Mackley. Public Comment will be included on the agenda for the February 22, 2023 Board Meeting

During the presentation, the Board discussed the following:

Board Member/County Comnmissioner Bingham asked a question regarding the location of the District's proposed Collinston Well. He was really interested in knowing what would be done to protect the rights of others in the area if there were impacts to them. Board Member Tim Munns asked about who had to prove impairment if there were to be impairment to local parties in Collinston. General Manager Mackley responded that we have 5 monitoring wells in place in Collinston and the well is approved to be drilled as a test well. The monitoring will show what the impacts are to parties with surrounding senior water rights. The potentially impaired party is responsible for demonstrating impairment according to state law. A water right has already been filed and corresponding protests were made. A water right hearing was held and the State Engineer subsequently approved a test well application.

Board Member Calder asked why there is variable capacity in the Beaver Dam System. Jared responded that it is due to seasonal and annual fluctuations of the springs. Collinston System capacity does not fluctuate and is limited by the production of the wells.

Boyd Bingham asked if the District charges impact fees for its water systems and when the impact fees were last evaluated. GM Mackley responded that the District does charge impact fees for its retail connections but not wholesale connections and the impact fees for the Collinston System haven't been updated since the system was built in 2015. An update is coming (see GM Report).

Financial Chairman Charles Holmgren asked if the Collinston System (tank) water had arsenic in it. Jared told him that the water comes from Deweyville and does not have arsenic in it.

Jay Capener asked about how the North Collinston Tank is used. It is used right now for supplying the Ukon Water Company's Water System. He then asked if there was additional capacity there. The District is allowing Ukon to use its capacity right now, but the District is not required to reserve capacity for them there.

There was a brief discussion on how many residents of Beaver Dam have their own source of water vs how many are customers of BRWCD. This information was not immediately available.

Commissioner Bingham had a question about the scenarios of building a pipeline between the Beaver Dam and Collinston Water Systems; who would pay for it? The answer was it would likely only be installed if there were sufficient development between the two systems to justify it and that the developers would be required to pay for the installation of the pipeline. There were some questions regarding the concern for the amount of time water would sit in a long pipeline between the two systems and not have adequate demand on the downstream end to keep the water clean and fresh. It was explained that this scenario typically only occurs until sufficient connections have been installed. During that intervening time, it is a significant concern. Jay Capener then asked if the Willow Creek Subdivision has expressed interest in connecting to BRWCD in recent years. The answer was no.

There was a discussion regarding secondary water systems. Vice Chairman Bott asked if the secondary water would need to be treated for arsenic. The answer was no. Board Member Lyle Holmgren asked about having advanced metering infrastructure (AMI) for separate outdoor use on a culinary water line. He wondered if this had been done elsewhere and how it is implemented. Jared Richins answered that it has been done elsewhere and that it can be done with a separate smart meter to regulate when the water is available, and/or by implementing a tiered rate structure. Lyle Holmgren then asked about the District participating with Tremonton City to upsize a pipeline in Tremonton to help out Tremonton City and to allow the District to continue to "wheel" water through there to deliver water to Ukon Water Company and Riverside North Garland Water Company. This could allow for additional water owned by Ukon Water Company, to be supplied to BRWCD.

There was a discussion about a potential well in Honeyville, its location and relation to the location of other wells in the Honeyville area. It's location is so remote that there isn't another well within a mile of its proposed location. It was noted that without adequate precipitation recharge, all water sources will be in trouble.

General Manager's Report

Project Updates

Flat Canyon Well Pump Station and Pipeline
We have entered into an agreement with Rocky Mountain Power (RMP) to supply power to the project site. Landis Construction Company has installed the electrical conduit, junction boxes and transformer pad. RMP will need to install a new power pole on Highway 38 and then install the ½ mile of wires up to the transformer pad and install and connect the wires to a transformer at the well site. We have already paid for all this work. We spent approximately $110,000 on the power installation. We are finalizing the bid documents and design drawings for the pump station, pipeline and chlorination at the South Collinston Booster Station. We will put that out to bid by the end of January. Our completion date will be on or before August 1, 2023.

Collinston Well
We have permission to drill this well as a test well. We have purchased six monitoring units that will measure the water levels in six surrounding well sites. Jeff is installing those. They have cellular connections that will send the data to a cloud-based platform where ourselves and any interested party that we grant permission to can see the data all together in real time. These will all be operational by

the end of the month. We will then gather data for a couple of weeks to get a baseline. In mid-February, we will begin to discharge 1.25 million gallons from our South Collinston Tank to the overflow pond over 4 to 5 days to simulate discharge of the well during pumping of the future completed well. The purpose of this exercise is to determine what the impacts of discharging so close to the pumping site are. We don't want to mask any of the drawdown effects that pumping would have on the surrounding wells. Bid documents for drilling a well 700 to 800 feet deep, with 8-inch casing will be completed and sent out by mid-February. Construction could begin as early as spring or as late as early fall.

Honeyville, Harper Ward and South Willard
Because of the federal money involved with these projects, we are waiting for some environmental and historical assessments to be completed prior to construction. Some design work and concepts are being completed at the same time. The environmental and historical prerequisites need to be completed while the ground is snow-free, so this won't be completed until spring. Design, bid and construction of production wells in Harper Ward and South Willard and a half-million-gallon water tank in Harper Ward will begin this late spring/summer. The Honeyville Site is anticipated to be a future well site. When and if that project is ready to proceed, we will have the environmental and historical assessment prerequisites already completed.

Water Right Policy Change
On February 6, there will be a public meeting called by the Utah Division of Water Rights to present a proposed update to the appropriation of water policy in the Bear River Basin in Box Elder County. Based on public statements that I have heard from that office, it is anticipated that the proposal will be to close the basin to all surplus or unappropriated waters, including the ability to drill a well for a single-family home in an unincorporated area of the valley.

I am highly curious to know how they plan on justifying that position based on their previous groundwater policy, which they defended even under litigation challenging the policy, and won the case in court. Now, it appears that the Governor and the state-level water management are requiring water that could have otherwise been put to a beneficial use and purpose to go to the Great Salt Lake (GSL). What will the cost be for that? What will have to not have water and what will have to die to send the water to the GSL? The GSL has long been a place where water goes to die. Will it make any difference to send the water there to die that we could have been using to help us live? Is that an overreaction like we experienced with the economy shutting down during the COVID pandemic? What is reasonable here?

County Water Master Plan
Box Elder County needs a Water Master Plan. The Bear River Water Conservancy District was created to conserve and protect water and water rights, develop and provide water for municipal, industrial and agricultural uses and to use these resources to best serve the residents of Box Elder County. The appropriations policy proposal that is described above goes against every part of the mission statement of BRWCD. Whether the policy goes through or not, it seems highly evident that if we do not plan what we want our future to look like in Box Elder County, and create a plan that describes how the water resources of the county will contribute to that picture, then we will be subject to how others would like to paint the picture. To me, this means that the entire county and all of its residents have a stake in the future by creating and implementing a water plan that represents our values, interests and well-being now and long into the future.

I have been attending meetings and holding discussions with various decision makers and representatives of various levels of government where I have been preaching the need for a County Water Master Plan. The response that I have received so far is very supportive of creating the plan. Not everyone understands the purpose of the water master plan or is aware that action needs to be taken right now, but that perception is changing as well.

I am asking for all the BRWCD Trustees to support this effort and to spread the message to the areas for which you have representative responsibilities. I have also been communicating with Representative Tom Peterson and Senator Scott Sandal. I am asking them to support this effort as well as to request funding to create the plan. I estimate that it will cost $500,000 and take two years to create the plan at the levels of involvement and utility that I envision will do the most good.

Financial Study
Starting last year, the Board of Trustees asked me to look into our total financial situation. We requested a 50% grant from the Unites States Bureau of Reclamtion (USBR) to help us with the cost of updating our financial situation. This made sense because studying the issue, to save us money and to determine appropriate impact fees, retail rates, wholesale rates and tax revenue collection, costs a significant amount of money. We are still waiting for notification of whether the grant request was successful or not. JUB Engineers helped us to submit the grant request to USBR several months ago, in anticipation of a partnership with BRWCD and a financial analysis company to perform the scope of work. We thought that we would be notified concerning the grant before the end of 2022. If we don't hear back from them soon, we will begin the process anyways, as we need to complete it within a six month period (for our own reasons).

Trustee Reports

Charles Holmgren – Attended ACME Water Company's Annual Meeting. Charles was the only non-board member in attendance. West Corinne Water Company meeting is coming up shortly. Snowpack in Bear River Basin is at 147% of normal. Total precipitation is at 128% of normal for the year. Tony Grove station is at 25 inches of snow water equivalent (SWE). Traditionally, when this station is at or above 24 inches of SWE by February 1, Pacificorp has not had to pump water out of Bear Lake until July 1, which is good for the irrigators. From October 1, 2022 – January 1, 2023, there has been 98,000 AF of water go through the Corinne Gage on the Bear River, to the Great Salt Lake (GSL). General Manager Mackley added that the GSLwas reported to have increased by 1.5 feet according to the Utah Division of Water Resources and that the salinity has decreased from 18.5% to 17.5%. In the past two years, it has reportedly only risen about 9 inches per year.

Jay Capener – Previous discussions with Joel Ferry, DNR Director, regarding sending water from Bear River Canal Company to the Great Salt Lake are no longer materializing. Many unanswered questions by the canal company and its shareholders.

DJ Bott – Snow depth readings for Brigham City's (BC) water supply are at 2.5 times the values from last year. BC received matching funding for a new 2 MG water storage tank to be constructed over the next two years. BC has matching funding for source development of a spring in Mantua on back side of the reservoir.

Brodie Calder – No report from Riverside North Garland Water Company (RNG). Ukon Water Company (Ukon) held their annual meeting and changed their bylaws to create approximately 65 to 67 new "Treasury B" shares. Ukon is looking at getting a new source of water (well) up on the west hills.
Lyle Holmgren – Tremonton City (Tremonton) completed Service Area 5 secondary water system. Tremonton is working with the canal company to try to balance water use between day and night (agriculture vs secondary water canal use). The secondary system is having a tremendous impact on reducing peak culinary water use in the summer. With Area 5 complete, this summer's culinary use should decrease even more.

Mark Larsen – No Report

Joe Summers – No Report

Richard Day – There is 5-feet of snowpack behind Pineview Reservoir. Much better than previous years. A new well is being drilled in South Willard area as part of a project to incorporate certain property into Willard City.

Tim Munns – Plenty of snow in Hansel Valley. Grateful to be on the board and serve. Water well owners in Hansel Valley try to monitor well levels twice a year.

Boyd Bingham – Virtually every county meeting Boyd goes to discusses water. The county needs to determine what it wants to do with planning for water use. There are outside interests looking over our shoulder.

David Forsgren – No Report

Operations Report – Given by Carl Mackley For Chance Baxter, who was excused to investigate a water emergency.

- **Systems Operations.**

We currently have no major ongoing issues in any of the six water systems that the district owns and operates.

- **Ongoing/Completed Projects.**

Bothwell Newman PLC Upgrade. We have completed the SCADA PLC upgrade on the Bothwell Newman well site. The site was down for 4 days while the upgrade was taking place. Bothwell Newman is the districts oldest Scada controlled site. Once the electricians got into the Scada panel we realized how much of a mess that we had. It appears that over the years things have been added and subtracted to the point that the panel was very disorganized and confusing. I had the electricians go through and clean up the panel. This cost us slightly more than the original bid, but I think it's worth spending some money on while we are performing a project like this. Since the upgrade everything has been operating perfectly.

- **Beaver Dam Springs flow.**

All our Beaver Dam springs have seen an increase in flows within the last month. All due to the wet weather we've seen over the last bit. Flows are now back to spring/runoff volumes. This is good to see. I've heard a few reports of similar results with other springs along the Wellsville range. Namely Corinne City and WCWC.

- **UKON Blending Vault.**

We have had some issues with the screens at Ukon Blending Vault. The screen on the ukon spring is getting plugged off with organic material like roots and leaves. We've even seen metal and rust. Our operators are having to clean the screens out at least once a week sometimes more. It appears to me that their pipe or spring collection areas are having issues. We've informed Ukon of this problem. They don't seem too concerned at the moment.

- **Collinston South Tank Fencing.**

We've hired Custom Fencing out of logan to repair and replace two gates around the south tank in collinston. One of the gates was down on the entrance to our right of way. There were two poor gates installed here originally. They were in dis repair. The other was up around the tank. We needed to

remove this portion of fence when the Collinston Well Pad was being constructed. The Equipment was too large to fit through the gates. The Repair on this section included a wider 30 ft gate. This should be wide enough for the future projects that we have planned on this site. Later this year we will have the contractors come back up and finish the perimeter fence. We will Wait to do this until after the construction projects are completed.

- **Wholesale Connections Current Usage 2023.**

WCWC – 150 gpm from our Bothwell system.
Tremonton Connections - Ranges from 0 to 500 gpm
UKON blending. – 75 gpm
RNG Riverside connection – 25-50 gpm due to a broke down well. Turned back off 1-24-23.

- **New Connections Installed.**

No new Connections installed since our last meeting.

A motion was made by Board Member Day to adjourn the meeting. The motion was seconded by Board Member N. Capener.

The meeting adjourned at 9:45 PM.

BEAR RIVER WATER CONSERVANCY DISTRICT

Beaver Dam Supply Analysis

January 25, 2023

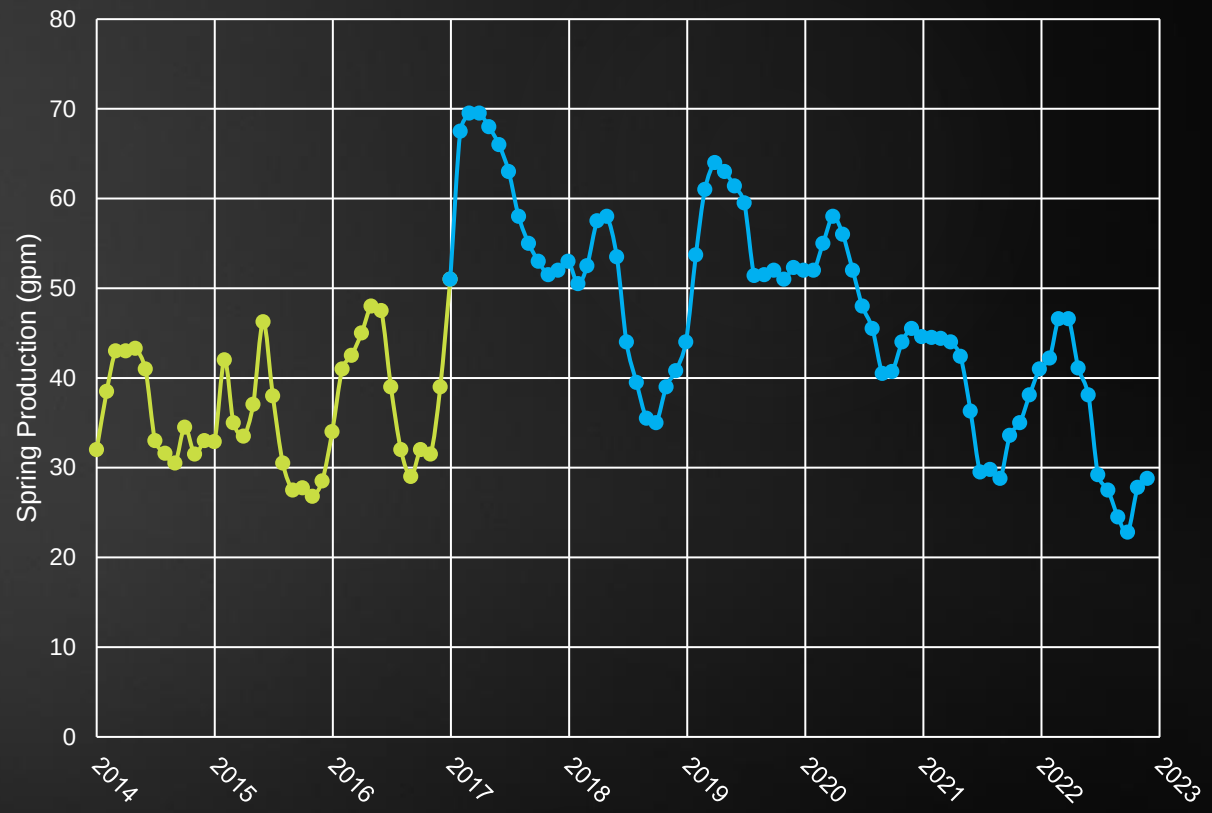
GROWING POSSIBILITIES

PRESENTATION TOPICS

- INTRODUCTION & BASIS OF ANALYSIS
  - SYSTEM OVERVIEW
  - CURRENT & PROJECTED DEMANDS
  - CURRENT & PROJECTED SUPPLY
  - STORAGE ANALYSIS
- ALTERNATIVES CONSIDERED
- RECOMMENDATIONS
- CONCLUSIONS
- PATH FORWARD

INTRODUCTION & BASIS OF ANALYSIS

- Observed decline in flows from the spring sources feeding the Beaver Dam Water System due to prolonged drought conditions
  - Observed decline since 2017 tied to drought conditions
- Beaver Dam is growing
- Keller Associates worked with District Staff to consider additional supply alternatives for Beaver Dam, and evaluate demand projections and storage conditions
- A water model was developed and used to consider current and future water system conditions



BRWCD BEAR RIVER WATER CONSERVANCY DISTRICT

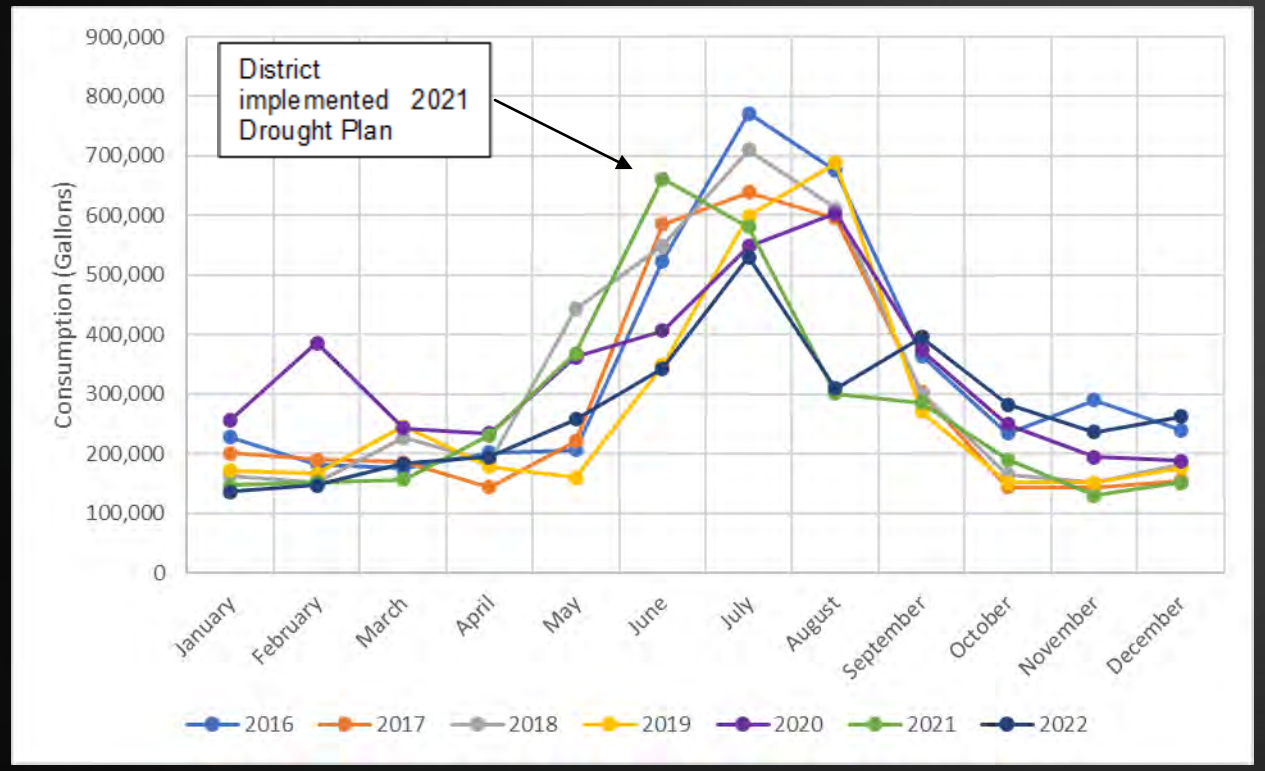
KELLER ASSOCIATES

SYSTEM OVERVIEW

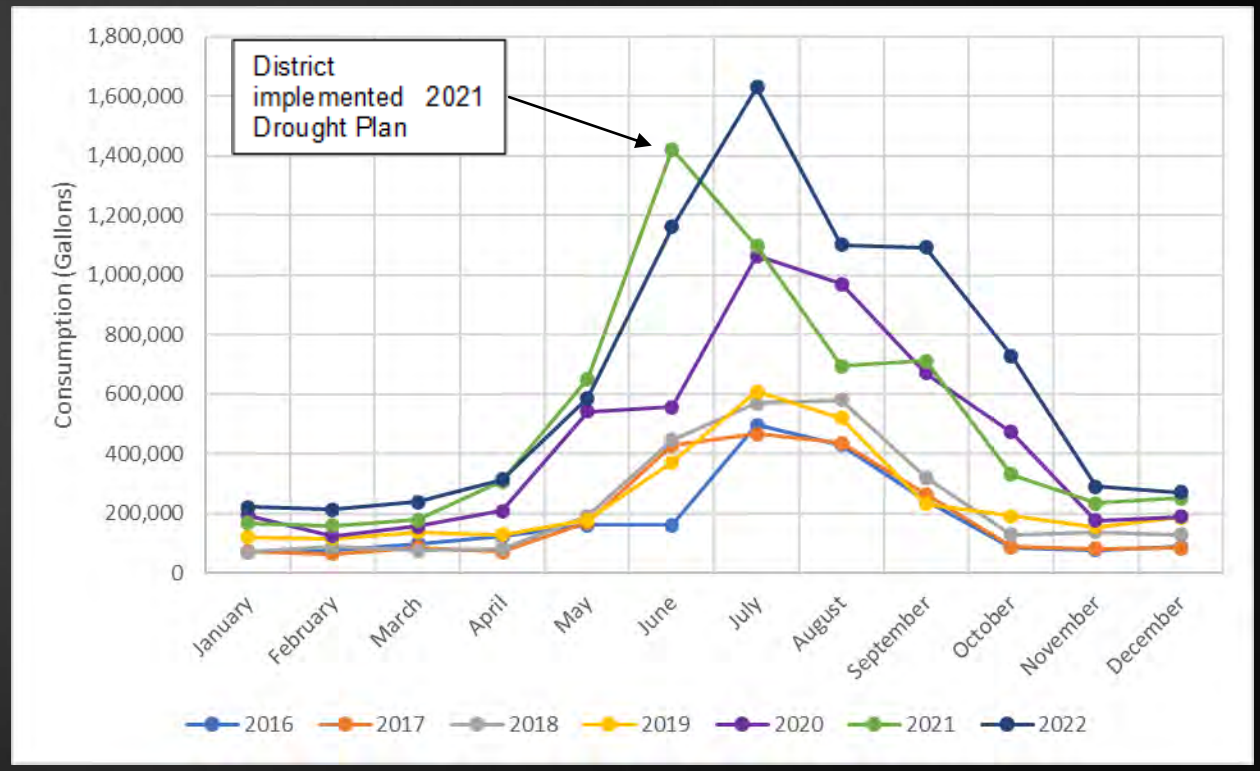
- BEAVER DAM WATER SYSTEM
  - Exclusively fed from spring sources
    - Upper Sleepy Hollow spring flows by gravity to system
    - Two Beaver Dam springs are pumped to system
  - Springs have elevated arsenic levels
  - Arsenic is removed ahead of storage
  - 8-Inch waterlines to system, fed by gravity
  - Limited potential for new source development
- COLLINSTON WATER SYSTEM
  - Exclusively fed from Deweyville (currently)
  - Flat Canyon Well coming online soon
  - A new Collinston Well has been proposed
  - Pump stations from Deweyville pump north to Collinston
  - Meter to Ukon Water Co. for blending out of North Tank
  - 2 pump stations, 2 tanks, 12” and 8” waterlines

CURRENT & PROJECTED SYSTEM DEMANDS

BEAVER DAM WATER SYSTEM



COLLINSTON WATER SYSTEM



BEAR RIVER WATER CONSERVANCY DISTRICT

KELLER ASSOCIATES

CURRENT & PROJECTED SYSTEM DEMANDS (20 YR)

- BEAVER DAM WATER SYSTEM
  - ADD – 8 gpm to 22 gpm
  - MDD – 30 gpm to 83 gpm
  - PHD – 109 gpm to 304 gpm
  - Annual use predicted to increase from ~4.2 MG to 11.6 MG
  - Nearly 3x increase predicted in Beaver Dam demands
- COLLINSTON WATER SYSTEM
  - ADD – 15 gpm to 59 gpm
  - MDD – 57 gpm to 225 gpm
  - PHD – 211 gpm to 829 gpm
  - Annual use predicted to increase from ~7.9 MG to over 31 MG
  - Nearly 4x increase predicted in Collinston demands

CURRENT & PROJECTED SUPPLY SUMMARY

- Water systems are required to provide source capacity for max day demand (R309-510-7).
- Water systems can apply for variances to use a lower standard (R309-510-5).
- It is recommended that redundant source capacity be provided to meet max day demand.

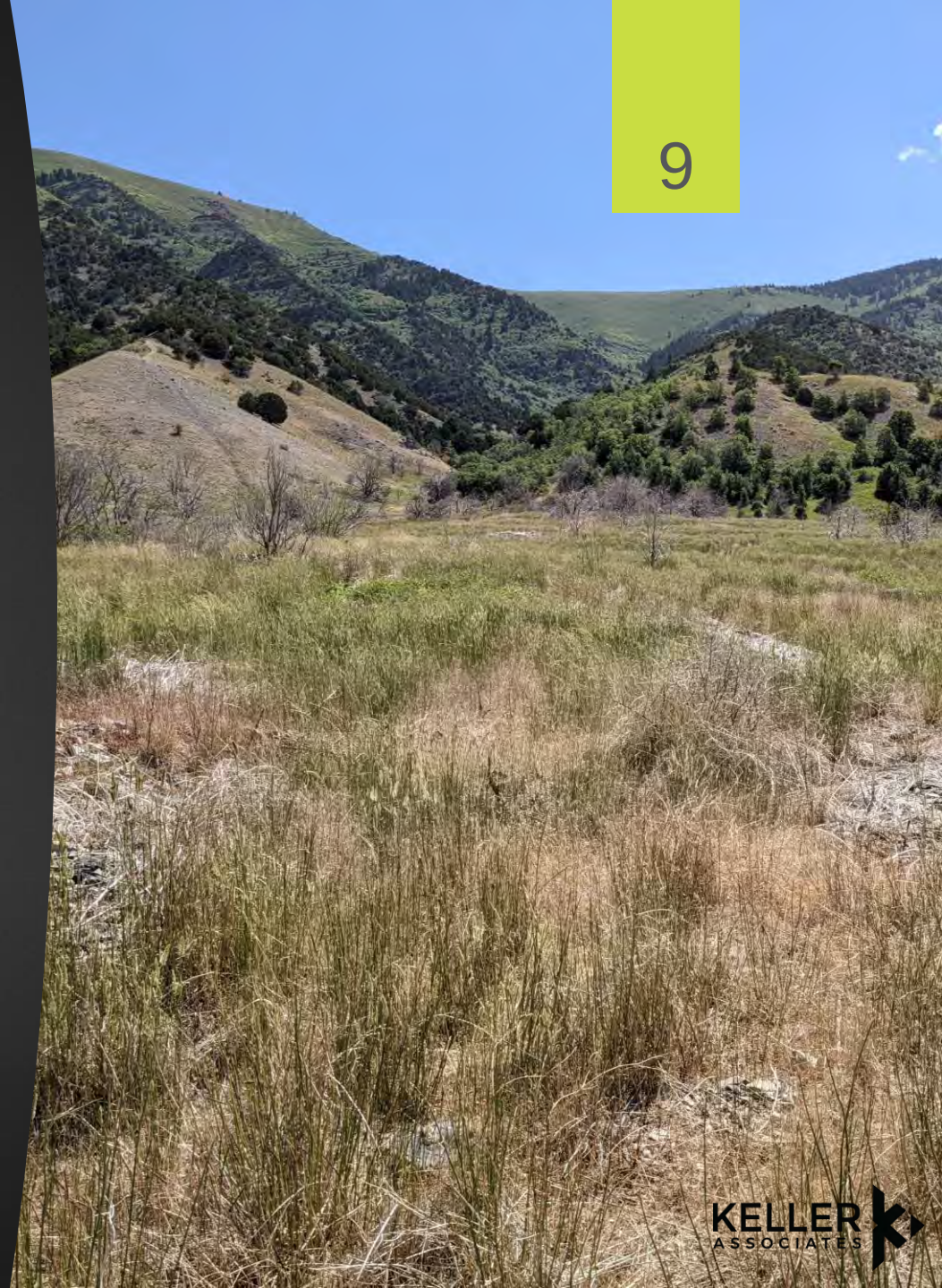
- BEAVER DAM WATER SYSTEM
  - Current source capacity – 34-60 gpm
  - Current estimated MDD – 30 gpm
  - Projected MDD – 83 gpm
  - Future supply deficit – 23-49 gpm
- COLLINSTON WATER SYSTEM
  - Current source capacity – 140 gpm
  - Current estimated MDD – 241 gpm
  - Projected MDD – 409 gpm
  - Future supply deficit – 269 gpm

STORAGE ANALYSIS

- BEAVER DAM WATER SYSTEM
  - 1 tank
  - Available Storage – 200,000 gal.
  - Current Storage Req'd – 137,000 gal.
  - Projected Storage Req'd – 187,000 gal.
  - Dedicated system backup generator is recommended
- COLLINSTON WATER SYSTEM
  - 2 tanks
  - Total Available Storage – 1,000,000 gal.
  - Usable Storage – 500,000 gal.
  - Current Storage Req'd – 314,000 gal.
  - Projected Storage Req'd – 623,000 gal.
  - Dedicated system backup generator is recommended
  - Back-feed provisions needed to increase usable storage

ALTERNATIVES CONSIDERED

- No Action & Connection Moratorium
- New Beaver Dam Area Well
- Collinston Area Water Source & System Intertie
  - 2400 West Intertie
  - Highway 30 Intertie
  - Dairy Rd. Intertie
- Optimized Use of Area Sources (Ukon Agreement)
- Hanson Spring
- Secondary Irrigation System
- Outdoor Watering Best Practices
- Tremonton Agreement
- Coldwater Canyon Well



NO ACTION & MORATORIUM

- Spring flows could continue to decline if drought conditions persist
- Beaver Dam is reliant on arsenic removal process for usable water and would benefit from dedicated backup power generation
- Growth will create additional water demand
- Future source development will be increasingly limited in Beaver Dam
- Not a viable alternative

BEAVER DAM AREA WELL

- Salt Lake series formations predominate in Beaver Dam
- Formation is silty clay, heavy, and poorly suited to water production wells
- Bjorklund & McGreevy (1974) concluded that the area is poorly suited to development of water production wells with 50 gpm capacity or greater
- Anticipated cost does not justify the potential benefit
- Not a viable alternative
- Governor's Declaration 2022-01 (Nov 2022) may stop the development of future Beaver Dam wells

COLLINSTON INTERTIE – 2400 W.

- System interties would be driven by growth and growth would fund this alternative
- An intertie between Collinston and Beaver Dam along 2400 West was considered in the District's 2017 WMP

Pros -

- A Collinston area source has greater potential to provide sufficient capacity to support growth
- Development of multiple Collinston sources is currently being pursued

Cons -

- Increases water age related problems
- Due to Beaver Dam PRV, only the lower portion of the system could be fed through this intertie

BRWCD BEAR RIVER WATER CONSERVANCY DISTRICT

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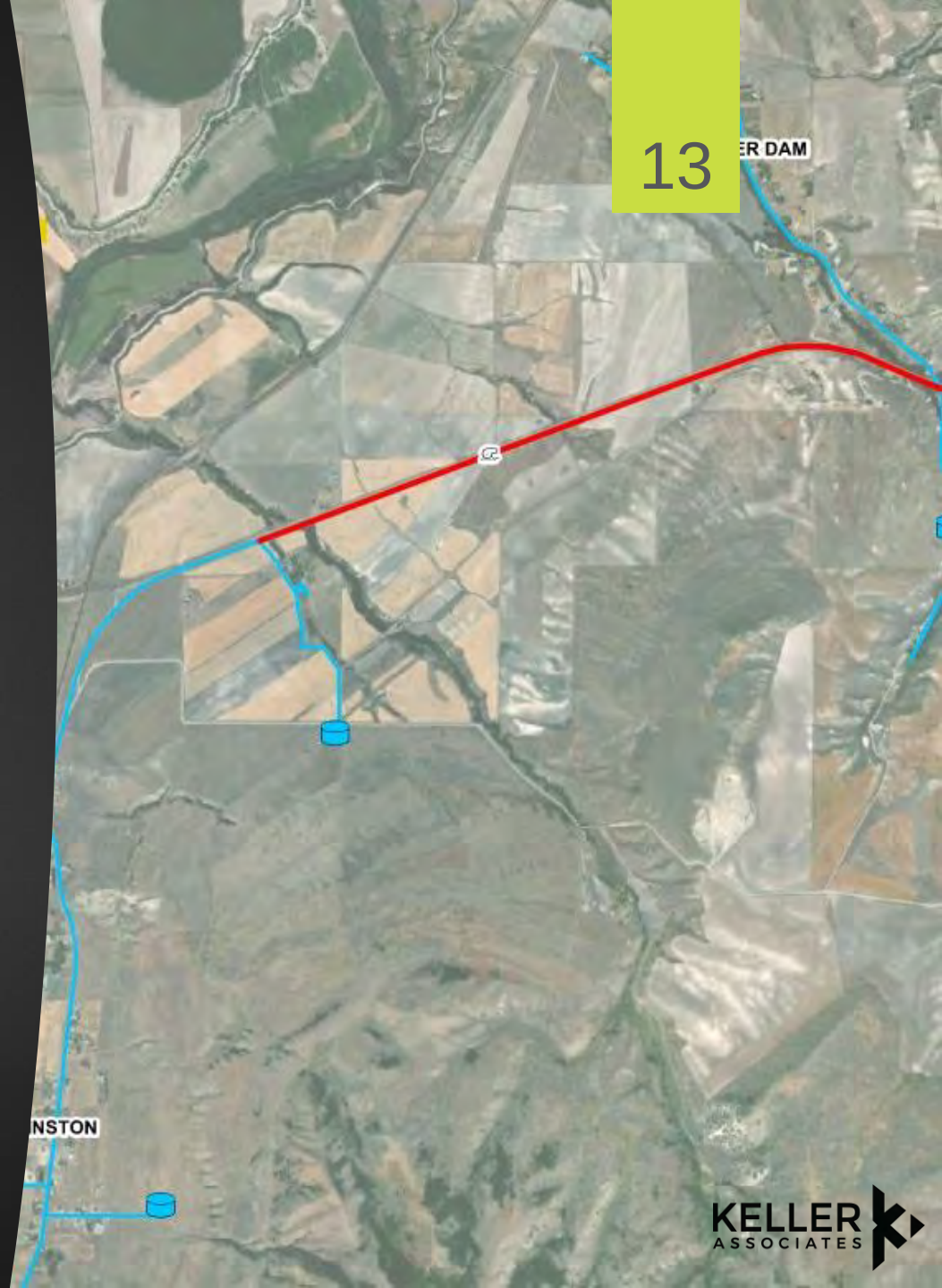
COLLINSTON INTERTIE – HWY 30

- Driven by growth and growth would fund this alternative
- An intertie between Collinston and Beaver Dam would be established along Hwy 30



Pros -

- Can service the entire Beaver Dam System
- Arsenic removal system could be transitioned to a blending system

Cons -

- Increases water age related problems
- Would require an additional pump station that would be sized to reach the existing Beaver Dam Tank

BRWCD BEAR RIVER WATER CONSERVANCY DISTRICT

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COLLINSTON INTERTIE – DAIRY RD.

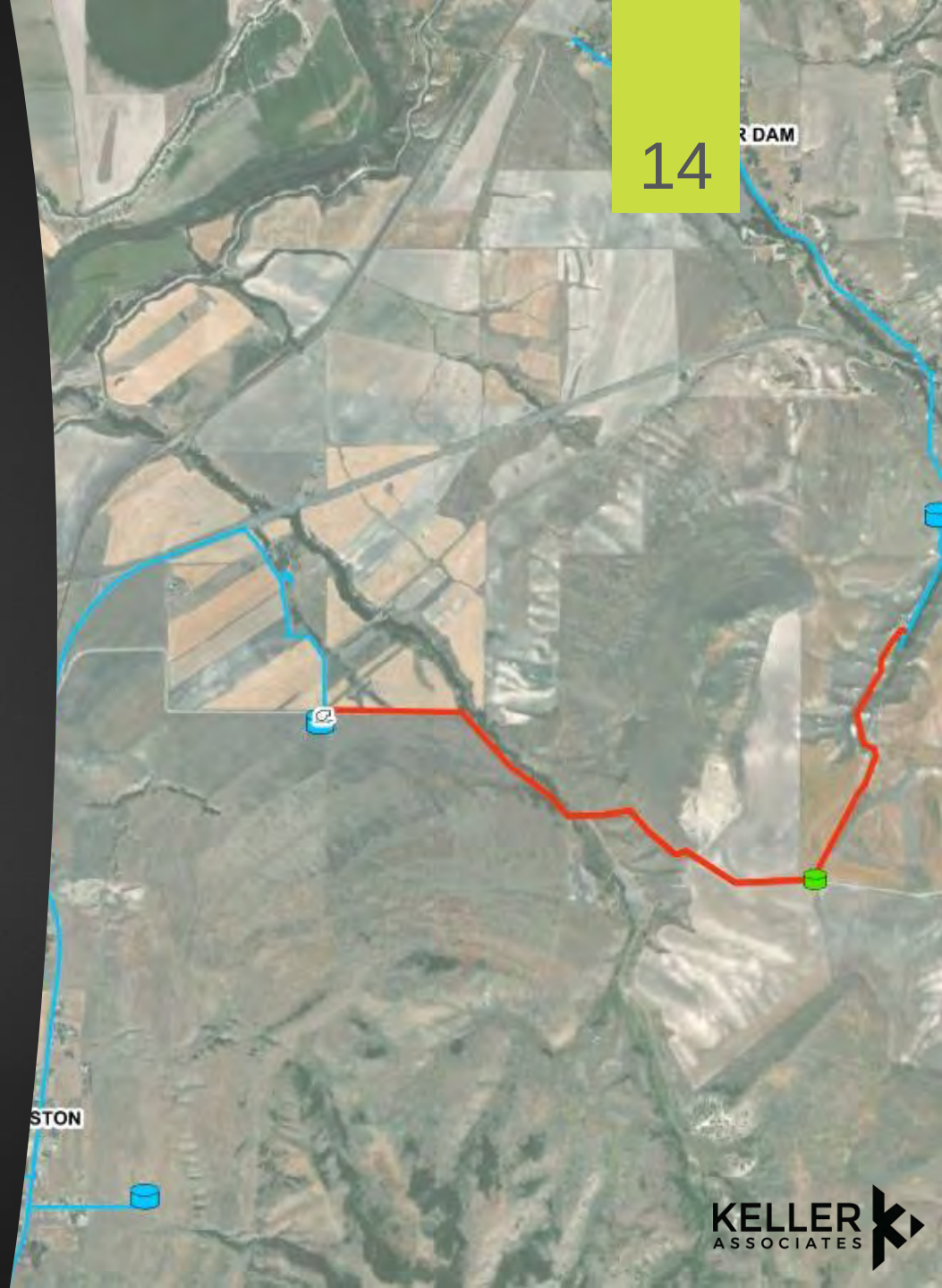
- Driven by growth and growth would fund this alternative
- An intertie between Collinston and Beaver Dam would be established along the Dairy Rd and through Earley Park

Pros -

- Can service the entire Beaver Dam System & the Willow Creek Subdivision
- Arsenic removal system could be transitioned to a blending system

Cons -

- Would require an additional pump station that would be sized to reach the entrance to Earley Park
- Increases residence time in system



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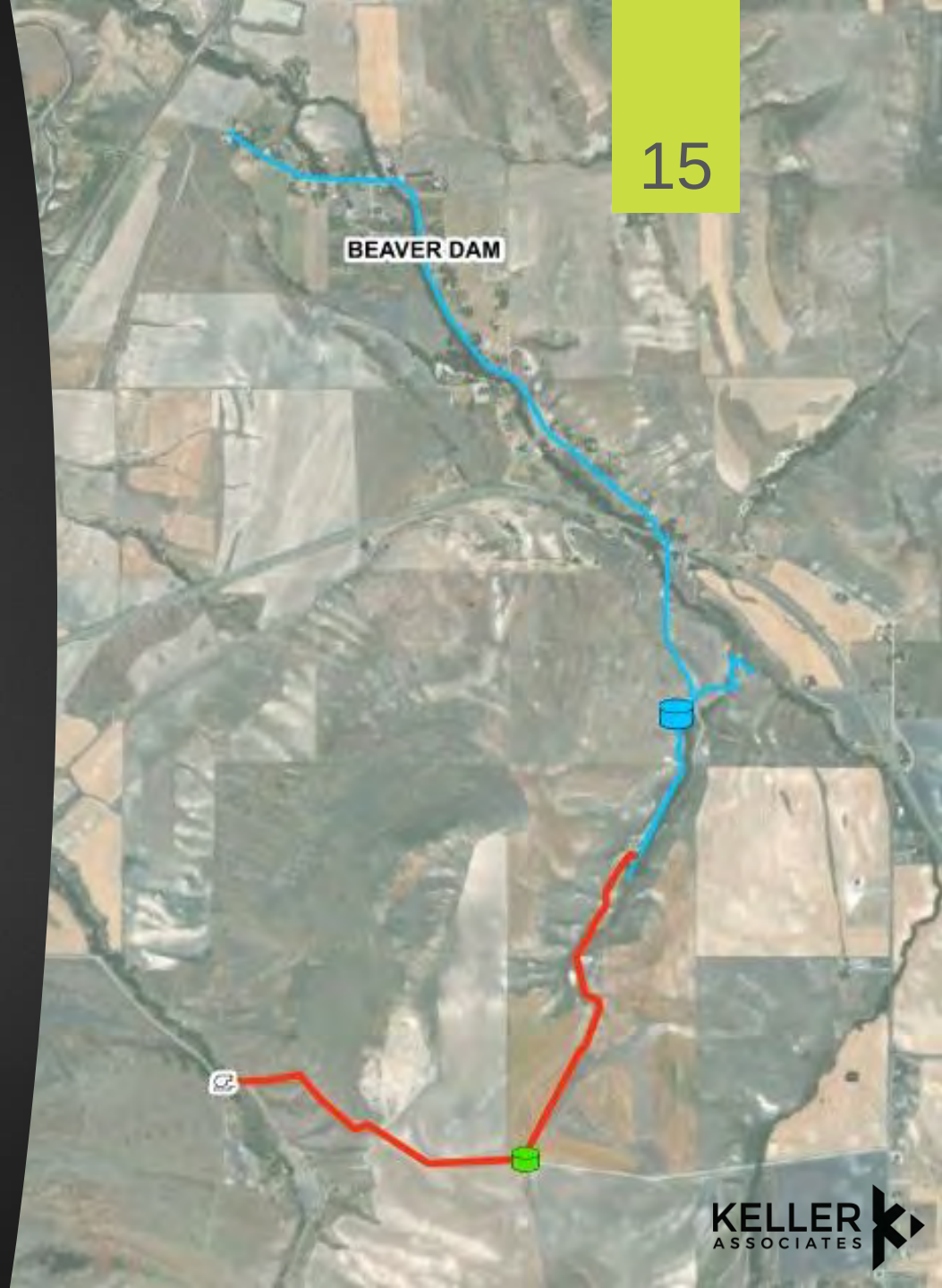
OPTIMIZED USE OF AREA SOURCES

- Ukon Water Co. maintains rights to various area spring sources. Their springs produce arsenic laden water similar to Beaver Dam's
- District currently wholesales water to the Ukon Water Company for blending through the North Collinston Tank
- The Ukon Water Co. consistently has surplus water which overflows near the blending station
- Overflow represents potential uncaptured water. An inter-tie into Ukon's system could allow for transfer to Beaver Dam for treatment and use
- Pumping & transmission facilities would be required

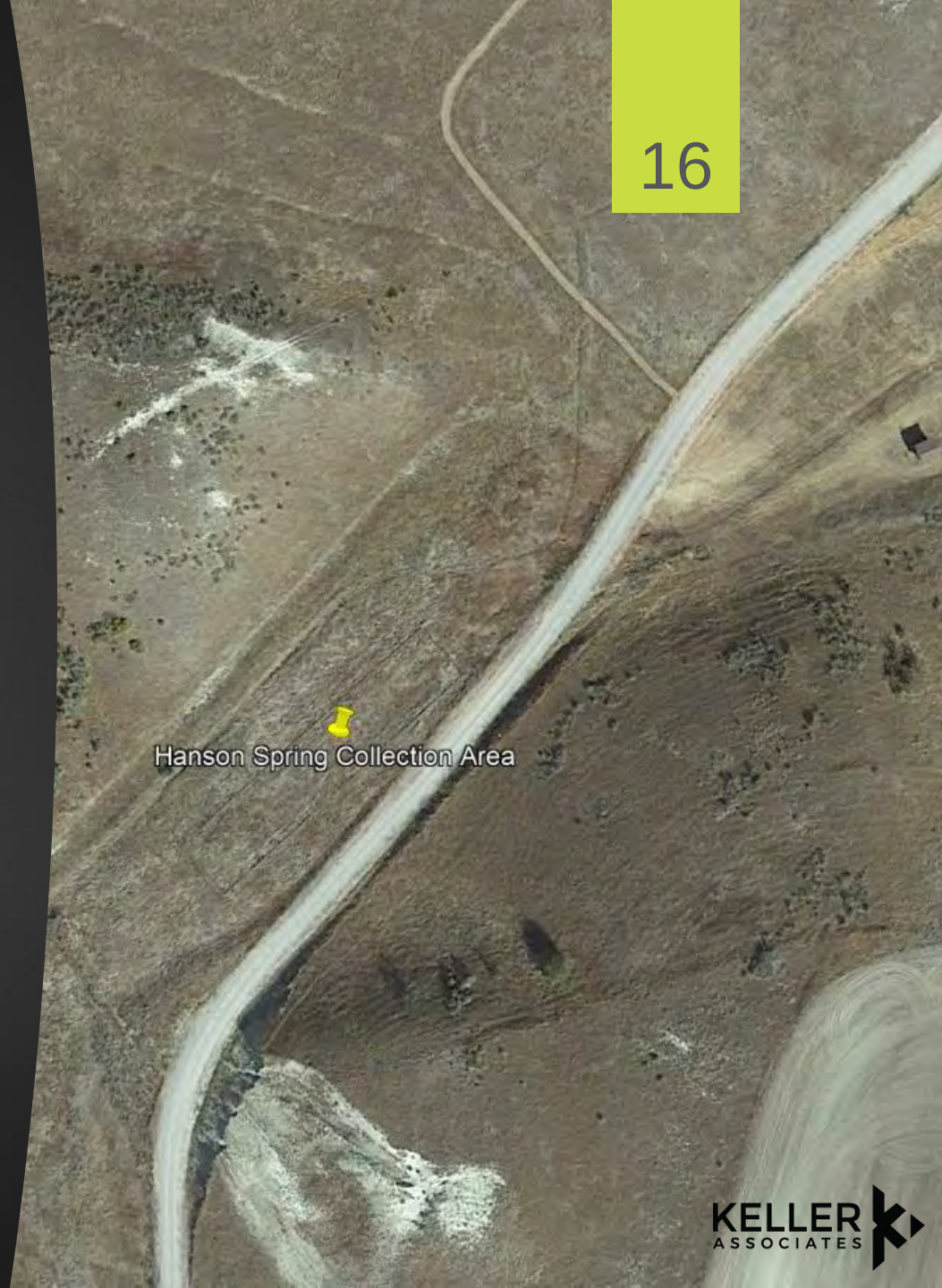


BRWCD BEAR RIVER WATER CONSERVANCY DISTRICT

KELLER ASSOCIATES

EARLEY PARK

- The District has been approached in the past about taking over operation of the water system at Earley Park
- The District would then provide a water service connection to Earley Park
- Discussions are very preliminary, the quantity and quality of Hanson Spring, which feeds the camp, is not well defined
- A wholesale water agreement is being developed with plans to take over operation of the system if beneficial to both parties
- Would provide additional flow to Beaver Dam during the week, and allow for irrigation at the Camp on the weekend



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SECONDARY IRRIGATION SYSTEM

- Very preliminary, no sources being considered
- A secondary irrigation system would not increase available supply, but would facilitate control of peak demands
- A consistent secondary water source (surface or ground water) would need to be developed
- Canal shares are turn based and not ideal for feeding a secondary water system
- District may consider implementing a water rights transfer policy
- Parallel distribution & metering facilities would need to be installed & maintained

BRWCD BEAR RIVER WATER CONSERVANCY DISTRICT

KELLER ASSOCIATES

OUTDOOR WATERING BEST PRACTICES

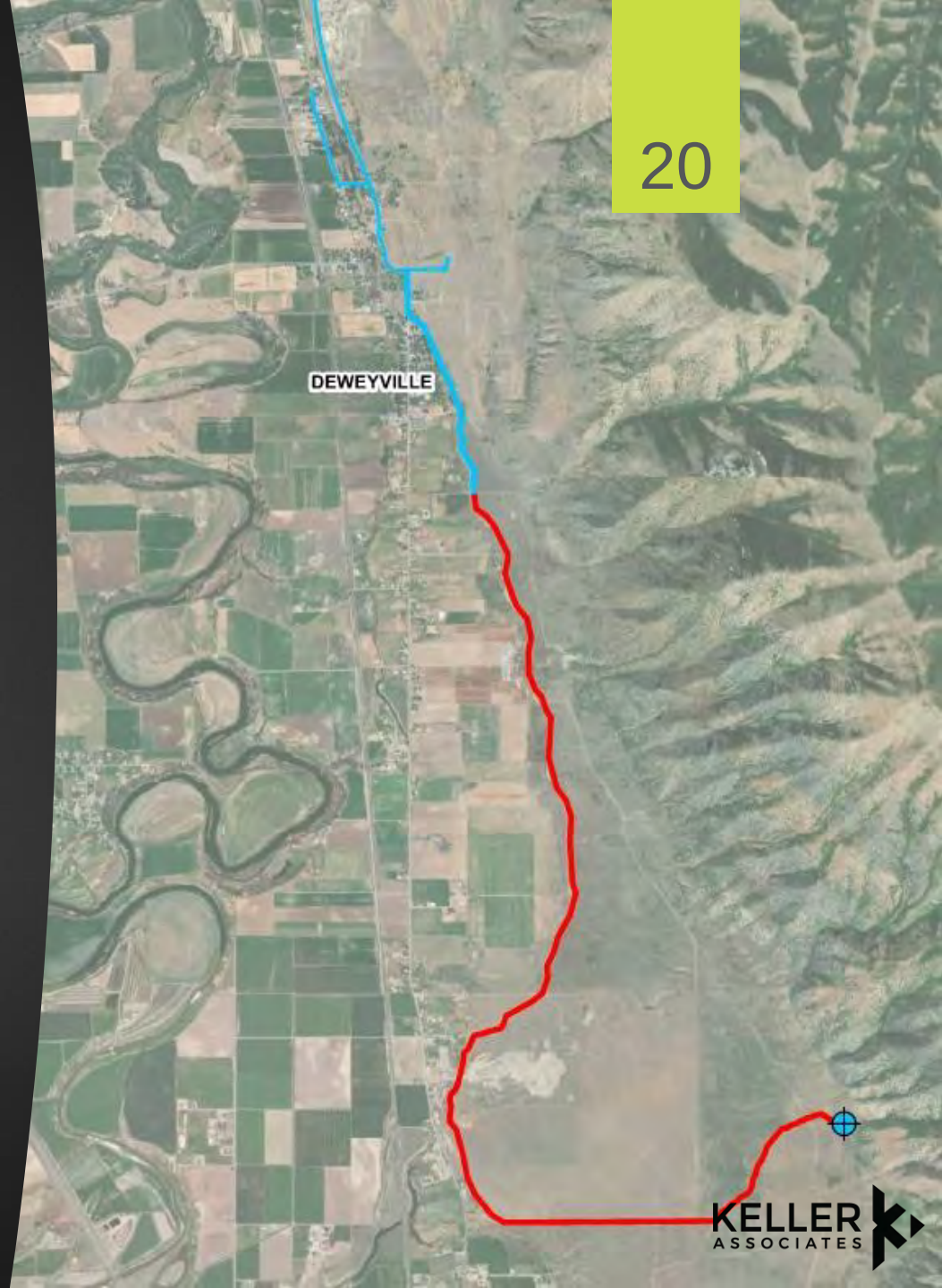
- District would focus on development of culinary sources, but manage outdoor use through a new metering schedule or dedicated outdoor use meters
- Decreases peak demands without additional source development
- District would NOT need to maintain separate distribution facilities
- Potential concern with requiring existing customers to reroute outdoor connections through a separate meter
- Advanced Metering Infrastructure (AMI) can allow water users to monitor usage in 'real-time'

WHEELING AGREEMENT

- Decreases demand on the Collinston System
- District is committed to provide up to 165 AF to the Ukon Water Co. in 2023
- Commitment to Ukon increases by 5 AF annually through 2035 (caps at 220 AF)
- District can transfer water to Ukon through Collinston or Riverside metering stations
- Tremonton currently allows for wheeling (exchange) of 100-acre feet of water from Bothwell to Riverside and remainder of Ukon commitment must pass through Collinston
- District would explore expanding this agreement and only provide minimum for blending through Collinston

COLDWATER CANYON WELL

- Expands Collinston Supply
- District filed water right application 29-4621 in 2018 to appropriate up to 1,000 AF near the mouth of Coldwater Canyon
- Division of Wildlife owns and manages the property in question
- Keller Associates facilitated the development of the initial applications for easements to the DWR
- Would require development of at least one well and the installation of a transmission line between the wells and the Collinston System
- Could also route a transmission line south to Harper Ward



BRWCD BEAR RIVER WATER CONSERVANCY DISTRICT

KELLER ASSOCIATES

CONCLUSIONS

- Beaver Dam spring sources are impacted by drought
- Current Beaver Dam and Collinston supply is limited
- Development of a Collinston Well will benefit Collinston, additional sources are needed due to the growth in the system
- Development of additional Beaver Dam water sources are in question due to Governor's declaration
- Agreement with the Church of Jesus Christ of Latter-Day Saints regarding flows from Hanson Spring and operation of the Earley Park Water System could be beneficial to both parties
- Adequate storage is provided for both Collinston and Beaver Dam, but improvements need to be made for future conditions
  - North Collinston Tank cannot backfeed system if needed which limits overall storage
  - Currently have limited backup power capability for all District systems

RECOMMENDATIONS

- Short-Term (0-2 Years)
  - Continue support of the development of additional water sources
  - Work to install connections and transfer switches and improve backup power for all systems
  - Consider outdoor water use best practices
  - Work with area partners (Tremonton, Ukon, Deweyville, Earley Park) to optimize area water supplies
- Medium-Term (2-5 Years)
  - Beaver Dam Inter-Tie via Hwy 30 or the Dairy Rd. & capture Ukon overflow w/ agreement
- Long-Term (5-10 Years)
  - Coldwater Canyon Well(s) & Transmission Line

PATH FORWARD

- Bring Flat Canyon Well online
- Complete currently planned projects
- Consider prudent policy changes
  - Dual metering or heavily tiered billing structure – outdoor irrigation management
  - Water right transfer required
- Coordinate with water partners to optimize area sources
  - Expanded Tremonton wheeling arrangement
  - Ukon overflow water
  - Deweyville supply arrangement
  - Earley Park Operations
- Monitor implications of Governor Cox's Declaration #2022-01 regarding unappropriated waters in the Great Salt Lake Basin, and the findings of the State Engineer

QUESTIONS?

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