Granger-Hunter Improvement District



WaterSMART: Drought Resiliency Projects -NOFO No. R23AS00005



GHID Anderson Water Treatment Plant and Well No. 18 Project

Applicant Contact:

Jason Helm, General Manager 2888 S 3600 E, West Valley, UT 84119 p: 801.968.3551 e: j.helm@ghid.org

Project Manager:

Todd Marti, Project Engineer 2888 S 3600 E, West Valley, UT 84119 p: 801.968.3551 e: t.marti@ghid.org

Table of Contents
Technical Proposal and Evaluation Criteria
Executive Summary 1
Project Location
Technical Project Description2
Performance Measures
Evaluation Criteria
E.1.1. Evaluation Criterion A – Project Benefits (30 Points)
E.1.2. Evaluation Criterion B – Drought Planning and Preparedness (20 Points) 10
E.1.3. Evaluation Criterion C – Sustainability and Supplemental Benefits (15 points) 11
E.1.4. Evaluation Criterion D – Severity of Actual or Potential Drought Impacts to be Addressed by the Project (15 Points)
E.1.5. Evaluation Criterion E – Project Implementation (10 Points)
E.1.6. Evaluation Criterion F – Nexus to Reclamation (10 Points)
Project Budget
Funding Plan and Letters of Commitment
Budget Proposal
Budget Narrative
Environmental and Cultural Resources Compliance
Required Permits and Approvals
Existing Drought Contingency Plan
Letters of Project Support and Letters of Partnership
Official Resolution
Overlap or Duplication of Efforts Statement
Conflicts of Interest Disclosure
Uniform Auditing Reporting Statement
Certification Regarding Lobbing

Technical Proposal and Evaluation Criteria

Executive Summary

Date: June 15, 2022 Applicant Name: Granger-Hunter Improvement District (GHID) City, County, State: West Valley City, Salt Lake County, Utah Project Manager: Name: Todd Marti, MPA, P.E. Phone: 801.955.2234 E-mail: t.marti@ghid.org Applicant Category: Category A Funding Request: \$5,000,000 Total Project Cost: \$13,410,000

A one-paragraph project summary that provides the location of the project, a brief description of the work that will be carried out, any partners involved, recent drought conditions in your project area. Describe how this project is expected to help alleviate impacts of those conditions, and identify any drought plans or other planning documents that support the project. This information will be used to create a summary of your project for our website if the project is selected for funding.

The Granger-Hunter Improvement District (GHID) Anderson Water Treatment Plant and Well No. 18 Project will provide an additional 2,500 acre-feet of drought-tolerant water supply and remove harmful contaminants with long-term health impacts from the key groundwater source, to the benefit of residents in a historically disadvantaged community. The proposed project will also install a 35-kilowatt solar system that will provide over 29,053 kilowatt-hours of renewable energy on an annual basis. Utah is currently experiencing the most severe drought conditions seen in the past 30 years. 99 percent of the State is in severe drought or worse and nineteen of the State's largest 45 reservoirs are below 55 percent of available capacity. The declining water levels throughout the State, combined with growth-driven water demand increases, have had a substantial impact on water reliability for GHID and its users. Approximately 80 percent of GHID's water supply is currently provided by a water wholesaler, Jordan Valley Water Conservancy District (JVWCD) who, due to ongoing drought conditions, has enforced strict drought restrictions on its retail customers, including GHID; thereby reducing supply and/or increasing the cost of potable water. GHID has been diligently planning and investing in expanding its groundwater pumping capacity in order to diversify its water portfolio and increase their resilience to drought by reducing their dependence on JVWCD and the associated surface flows during dry years. The proposed project will also help reduce the need for other long-term large water projects being planned in the State such as the Bear River Project, which seeks to bring Bear River water to the Salt Lake Valley.

State the length of time and estimated completion date for the proposed project including the construction start date (mm/yr) (if applicable) **Note: proposed projects should not have an estimated construction start date that is prior to** *March 2023.*

Based on the Reclamation contract timeline, GHID plans to start the environmental effort and preliminary design in March 2023. The final design will be completed in March 2024. GHID plans to release the project for bids in April 2024. It is anticipated that the construction of the water treatment plant and well will start in June 2024 and will be completed and ready to bring

online in October 2025. Final reports and project closeout will be in February 2026. The project will be accomplished within the three-year allowance.

Whether or not the proposed project is located on a Federal facility.

No, the project is not located on a Federal facility. However, GHID receives a large percentage of its water (about 80 percent) from Jordan Valley Water Conservancy District (JVWCD) to supplement its culinary water supply. JVWCD obtains water from the Central Utah Water Conservancy District, which is a part of a Bureau of Reclamation Project, including the Central Utah Project Bonneville Unit.

Project Location

Provide specific information on the proposed project location or project area including a map showing the geographic location. For example, [project name] is located in [county and state] approximately [distance] miles [direction, e.g., northeast] of [nearest town]. The project latitude is {##**##'N} and longitude is {###**##'W}.

The proposed GHID Water Treatment Plant and Well No.18 are located in West Valley City on the west side of the Salt Lake Valley in Salt Lake County, Utah. The project latitude is 40° 43'13"N and longitude is 111° 56'14"W. See Attachment A – Project Location and Project Detail Maps.



Figure 1 Salt Lake Valley

Technical Project Description

Provide a more comprehensive description of the technical aspects of your project, including the work to be accomplished and the approach to complete the work. This description should provide detailed information about the project including materials and equipment and the work to be conducted to complete the project. This section provides an opportunity for the applicant to provide a clear description of the technical nature of the project and to address any aspect of the project that reviewers may need additional information to understand.

GHID will construct a small water treatment plant (Anderson Water Treatment Plant) and drill and equip a new well (Well No. 18).

Anderson Water Treatment Plant

Granger-Hunter Improvement District (GHID) receives about 80 percent of its drinking water from Jordan Valley Water Conservancy District, a wholesale water supplier in the Salt Lake Valley. The remaining 20 percent of the water is supplied by seven GHID-owned wells. GHID's contract with JVWCD is "take or pay." The purchase contract is for 18,500 acre-feet, but even if less is used, the base rate stays the same. GHID may take more than 18,500 acre-feet when available and if necessary, but this amount is reduced during times of drought. The water rate increases yearly based on peak demands, so GHID's wells have primarily been used to address peak daily and hourly demands. In the past decade or so, GHID has been faced with increasing numbers of water quality related customer complaints. In 2018, GHID contracted with Confluence Engineering Group (Confluence) to investigate the potential causes for the water quality issues and complaints. Confluence determined that the water from numerous wells in GHID's system were impacted with high levels of iron, manganese and ammonia. In 2019, GHID contracted with J-U-B ENGINEERS, Inc. (J-U-B) to prepare a Water Quality Scoping Study. The Study evaluated the potential costs for addressing the water quality issues and complaints, versus purchasing more water from JVWCD. The outgrowth of that Study was GHID's commitment to continue to use their groundwater resource because of its reliability and drought tolerance, and the decision to begin constructing water treatment plants (WTPs) to address the water quality concerns. GHID is in the middle of constructing their first water treatment plant located at the Well No. 12 site, which will address ammonia, iron, and manganese in Wells No. 1, 12, and 17.

This project would also seek to regionalize water treatment by constructing one WTP to treat water from Well No. 16 and the proposed Well No. 18. Well No. 16 has water quality concerns similar to that of Wells No. 1, 12, and 17 – ammonia, iron, and manganese. GHID's wells are all on the east side of their system but run the extent of it from north to south. It is appropriately assumed that Well No. 18 will have water quality similar to that of Well No. 16 when it is drilled nearby – The east side of the GHID system is closer to the Jordan River and much more prolific than the west side of the system and valley, which is why all of their wells are in essentially the same north to south corridor.

To address the high levels of ammonia, the capacity of the chlorination systems – onsite sodium hypochlorite generation – at each well house will be upsized. A treatment plant will be constructed on land at Well No. 16 or in close proximity. Horizontal, pressurized filters using a greensand type media will be used to remove the manganese and iron. A final dose of chlorine will be added at the WTP for both disinfection and to ensure complete oxidation of the ammonia. The WTP will be designed with two trains of filters each sized for approximately 3,000 GPM. Each train will be divided into three or four cells to let it independently backwash with less water. Backwash water will be sent to the sewer system, but the site will be master planned to include side stream treatment to allow the backwash water to return to the head of the plant. The backwash water and finished water will all be metered at the site.

Well No. 18

Well No. 18 is needed for the following reasons: redundancy of the existing well system, to ease maintenance – there is always one or two wells down at any given time in the system for maintenance, a more drought-tolerant supply, less reliance on JVWCD's surface water supplies

from out of the basin, and due to the transition of use and pressure for additional water from infill with higher density uses.

GHID owns thirteen water rights for a total supply of 21,266 acre-feet per year of groundwater. One of the eight GHID wells is not utilized (Well No. 4) due to water quality concerns, so not all the water rights are utilized. Well No. 18 will allow GHID to fully utilize its water rights. Due to the seasonality of outdoor demand and the JVWCD 'take or pay' contract, wells are only used in the irrigation season, therefore limiting their overall use. Currently, GHID can pump up to 14,050 GPM assuming all wells are functional. To fully utilize the water rights at 16,325 GPM of water rights during the irrigation season, Well No. 18 is needed. The new 28-inch diameter Well No. 18 will be approximately 1,100 feet deep with the pump at approximately 400 feet. The well casing is anticipated as a 20-inch diameter steel casing. The static water level will be approximately 100 feet with screened sections starting at 450 feet.

The flow rate for the new well is anticipated at 2,500 acre-feet per year -3,000 gallons per minute for six months of the year. The well will be equipped with magnetic flow meters that will allow GHID to track water usage. The well lies within the Zone 4 GHID pressure zone.

With past droughts, GHID has concentrated on outdoor water conservation efforts through messaging and outreach. West Valley City, where the District is located, does not own or operate any secondary water systems, though some private irrigation canals traverse the District and may supply irrigation water to individual properties. Drinking water is generally used for all outdoor water uses, including residential irrigation, pools, parks, schools, and other commercial and industrial uses. If the drought persists, GHID will likely have to consider stronger restrictions on culinary water for outdoor use and industrial use, which will impact the area's economy and could have significant financial ramifications for the City and workers in these industries. These restrictions could include mandatory restrictions on outdoor irrigation time, quantity, and frequency.

Performance Measures

All applicants are required to propose a method (performance measure) of quantifying the benefits of their proposed project once it is implemented. Quantifying project benefits is an important means to determine the relative effectiveness of various water management efforts, as well as the overall effectiveness of the project. The project offers significant benefits that can be quantified in three specific performance measures:

1. **Pumping Capacity** – The proposed project is anticipated to increase GHID's pumping capacity by approximately 3,000 gallons per minute – operated for six months per year. This equates to approximately 2,500 acre-feet per year that can remain in the JVWCD system and reservoirs.

The water treatment plant and well will be equipped with electromagnetic flow meters. These meters will give GHID an accurate measurement of how much water is extracted from the wells, treated, stored, and then pumped into the system. These meters will send the readings to GHID's SCADA system to monitor and provide monthly and annual usage reports for the Bureau of Reclamation (BOR). GHID will then be able to analyze and compare the historical well water used versus future well water, specifically at Wells No. 16 and 18. GHID monitors its groundwater produced and served to customers and

will continue to do so. Lastly, metered connections at the point where JVWCD water enters the system will continue to be monitored and compared to previous years.

- 2. Increased Water Quality The water quality of the water leaving the water treatment plant will be evaluated at the point-of-compliance using online analyzers for ammonia, chlorine, and turbidity. Additionally, per State requirements and GHID's sampling program, regular, routine grab samples for iron and manganese will also be taken. Within the plant, operators will be able to sample the raw water from the wells, the backwash water, and the finished water from each train. Additionally, each train will have sample ports located within the media beds to allow for sampling. GHID also tracks customer complaints using GIS with its CityWorks software program. This allows them to track complaints over time and by location.
- 3. **Cost Savings** The project is anticipated to result in 2,500 acre-feet per year that will not have to be imported from JVWCD. Imported water from JVWCD especially during times of drought can be up to 50 percent more expensive than groundwater production prior to treatment and can be easily quantified.

In summary, GHID either plans to implement or will continue the following to measure and track the proposed project benefits:

- Measure the quantity of well water used from the new well, Well No. 18.
- Measure the quantity of well water treated at the new water treatment plant from Wells No. 16 and 18.
- Measure the quality of the water being produced at the WTP using periodic ammonia, iron, and manganese grab samples at the point of compliance; and using online analyzers to measure the chlorine, turbidity, and ammonia in the finished water.
- Measure the number of complaints by location.
- Measure the quantity of water provided by JVWCD.

Evaluation Criteria

E.1.1. Evaluation Criterion A – Project Benefits (30 Points)

How will the project build long-term resilience to drought? How many years will the project continue to provide benefits?

The proposed Anderson Water Treatment Plant and Well No. 18 will contribute an **additional water supply of 2,500 acre-feet per year and treat up to 9,500 acre-feet per year** for an expected useful life of at least **50 years.** This project will help build long-term resilience to drought and reduce the need for emergency response actions by providing the following benefits:

- Implement a long-term strategy to support and supplement GHID's increasing water demands by increasing high-quality water production by approximately 2,500 acre-feet per year for which GHID already holds water rights.
- Decrease GHID's reliance on more expensive imported water from JVWCD, who supplies water to 17 member agencies, including 13 cities.
- Help JVWCD to decrease its dependence on Bureau of Reclamation water via the Central Utah Project.

- Support minority and disadvantaged communities by allowing GHID to use a local and reliable resource, which has a lower cost, thereby allowing these residents to enjoy lower-cost water bills.
- Support efforts aimed at climate change resiliency by providing a renewable energy source and locally supplied resources, which will lower GHID's carbon footprint and decrease greenhouse gases.

GHID currently receives its potable water from two sources: imported water through JVWCD and groundwater from the Salt Lake Valley aquifer. JVWCD imports water from Central Utah Water Conservancy District through the Central Utah Project.

There have been several significant droughts in the Salt Lake Valley in recent years. GHID has considered the potential impacts that climate change may have on the quantity of imported water that will be available in the future. In 2021, GHID purchased 80 percent of its water from JVWCD and supplied 20 percent of the water from groundwater in the Salt Lake Valley Aquifer. GHID currently has 7 groundwater production wells in operation that produce less than GHID's total water rights of 21,266 acre-feet per year. The proposed Well No. 18 and Anderson Water Treatment Plant will significantly reduce reliance on JVWCD's water supply in times of drought and water supply restrictions.

• Will the project make additional water supplies available? If so, what is the estimated quantity of additional supply the project will provide and how was this estimate calculated? Provide this quantity in acre-feet per year as the average annual benefit over ten years (e.g., if the project captures flood flows in wet years, provide the average benefit over ten years including dry years).

Yes, the project will make additional water supplies available to GHID water users. Well Number 18 will provide an **additional supply of 2,500 acre-feet per year**. This estimate was calculated using the anticipated 3,000 GPM production capacity multiplied by the 6-month time frame that the well will be in production during any given year. The additional supply is anticipated to remain constant throughout a 10-year period, as the Salt Lake Valley Aquifer is not anticipated to be substantially impacted by drought.

• What percentage of the total water supply does the additional water supply represent? How was this estimate calculated?

The contract with JVWCD allows GHID to use up to 18,500 acre-feet per year. Historically, JVWCD has allowed GHID to purchase additional water in any given year of up to 20 percent above its contract amount. If this additional water is available, the total volume of water available from JVWCD is 22,200 acre-feet per year. GHID also owns 13 water rights totaling 21,266 acre-feet per year in the Salt Lake Valley Aquifer, but currently only has the capacity to pump 11,331 acre-feet per year with the existing wells in production.

Well No. 18 will increase the total GHID **groundwater well production capacity** by approximately **22 percent**. As reported in the 2022 Drinking Water Master Plan, there is an existing 11,331 acre-feet per year of groundwater well production capacity.

When added to the **total supply currently available** to GHID, which is 33,531 acre-feet per year, the additional 2,500 acre-feet per year, or 3,000 GPM, will represent an additional **7.4 percent.**

• Provide a qualitative description of the degree/significance of the benefits associated with the additional water supplies.

The benefits of the Anderson Water Treatment Plant and Well No. 18 include the following: **Redundancy and Reliability:** Well No. 18 and the treatment of Well No. 16 and 18 will provide GHID a redundant and reliable source of locally produced water. At any given point in time, GHID typically has one-to-two wells out of service either for routine maintenance or to address something more severe, prompting a shut-down. Placing an additional 3,000 GPM production well into service and treating the water from Wells No. 16 and 18 will provide quality water with reasonable redundancy to ensure reliability, even during drought conditions when water from JVWCD may be curtailed or the cost substantially increases.

Water Quality: The water treatment plant will remove high concentrations of ammonia, iron, and manganese that are currently present in the water from Well No. 16 and expected in Well No. 18. All three contaminants have health concerns associated with them and create discoloration of the water leading to water quality complaints.

Management Flexibility: Well No. 18 will allow GHID more flexibility during peak periods and the irrigation season by adding an additional source. This well and the water treatment plant will be able to be sent to almost any pressure zone in the system.

Will the project improve the management of water supplies? For example, will the project increase efficiency, increase operational flexibility, or facilitate water marketing (e.g., improve the ability to deliver water during drought or access other sources of supply)? If so:

• How will the project increase efficiency or operational flexibility?

Water demand continues to increase throughout GHID's service area as land-use continues to evolve to more and more high-density housing. As demand from the multi-family sector continues to increase, and the reduction in water use from conservation efforts begins to plateau, better management of available water supply becomes more essential. By providing additional groundwater pumping capacity, the proposed project will improve water management in two ways:

Water Availability: This project would allow GHID to generate more water from the local groundwater supply, and therefore reduce the strain on imported water sources that rely on several surface water flows. This will give GHID better control and help promote conjunctive use that will utilize more surface water during wet years and allow underground aquifers to recharge during dry years. This allows GHID to utilize more groundwater and allows more surface water to remain in streams and in reservoirs. This will help optimize the associated environmental benefits and will better manage available water supplies on the State level.

Operational Flexibility: Well No. 18, after being treated at the Anderson Water Treatment Plant, can be sent to almost any pressure zone in the system through the Breeze Pump Station. The well will produce a steady source of groundwater that is not as susceptible to the impacts of drought and is cost efficient, giving GHID one more tool to better respond to ongoing droughts.

• What is the estimated quantity of water that will be better managed as a result of this project? How was this estimate calculated? Provide this quantity in acre-feet per year as the average annual benefit over ten years (e.g., if the project captures flood flows in wet years, provide the average benefit over ten years including dry years).

Currently, GHID has rights to 21,266 acre-feet per year of groundwater in the Salt Lake Valley Aquifer, but only has the capacity to pump up to 14,050 GPM or 11,331 acre-feet per year, assuming all wells are functional. In order to fully utilize the water rights available to GHID, Well No. 18 will provide an **additional 2,500 acre-feet per year** of supply during the irrigation season when demand is at its highest.

• What percentage of the total water supply does the water better managed represent? How was this estimate calculated?

The total supply currently available to GHID is 33,531 acre-feet per year. The proposed project will increase GHID's groundwater production by 2,500 acre-feet per year – 3,000 GPM – which will represent **6.9 percent of the new total available water supply** that will be better managed by allowing GHID to generate more water from the local groundwater supply, and therefore reduce the strain on imported water sources that rely on several surface water flows.

(2,500 acre-feet per year / 36,031 acre-feet per year = 6.9%)

- *Provide a qualitative description of the degree/significance of anticipated water management benefits.* The project will optimize GHID's water rights and its ability to produce water locally using wells and the water treatment plant, while relieving the demand placed on water from JVWCD.
- Will the project make new information available to water managers? If so, what is that information and how will it improve water management?

This project will include adding SCADA for Well No. 18 and the water treatment plant to the existing SCADA system, allowing the water manager to remotely collect, analyze, and monitor data throughout the entire system. It will enable the water manager to fill reservoirs during non-peak periods and pump water through the system during high peak periods. The entire water delivery system will be managed in real-time, reducing water losses and pumping costs at GHID's wells.

Wells

• What is the estimated capacity of the new well(s), and how was the estimate calculated? Well No. 18 has an estimated capacity of 3,000 GPM.

The new 28-inch diameter Well No. 18 will be approximately 1,100 feet deep with the pump at approximately 400 feet, which is similar to other wells in the area – Well No. 15 and 16 – that have similar capacities. The well casing is anticipated at a 20-inch diameter steel casing. The static water level will be approximately 100 feet with screened sections starting at 450 feet. The flow rate for the new well is anticipated at 2,500 acre-feet per year – 3,000 gallons per minute for 6 months of the year.

• How much water do you plan to extract through the well(s), and how does this fit within state or local laws, ordinances, or other groundwater governance structures applicable to the area?

Currently, GHID has rights to **21,266 acre-feet per year** of groundwater in the Salt Lake Valley Aquifer, but only has the capacity to pump up to 14,050 GPM or **11,331 acre-feet per year**, assuming all wells are functional. In order to fully utilize the water rights available to

GHID, Well No. 18 will provide an **additional 2,500 acre-feet per year** of supply during the irrigation season when demand is at its highest by pumping 3,000 GPM for 6 months per year.

- Will the well be used as a primary supply or supplemental supply when there is a lack of surface supplies? All of GHID's production wells are used to supplement the water they purchase from JVWCD. Their contract with JVWCD allows for using up to 18,500 acre-feet per year, and the potential to use up to 20 percent above that if available. To avoid expensive overages, GHID prefers to use its own supplies, particularly during the summer season when seasonal irrigation needs are met using this water. The GHID production wells are more reliable, while the JVWCD could be curtailed during a drought or a catastrophic event, such as a regional power outage or earthquake. GHID is located near the end of a 17.5-mile aqueduct, which could be shut down during these emergencies if it sustains damage.
- Does the applicant participate in an active recharge program contributing to groundwater sustainability?
 No, GHID does not participate in an active recharge program contributing to groundwater sustainability.
- Please provide information documenting that proposed well(s) will not adversely impact the aquifer it/they are pumping from (overdraft or land subsidence). At a minimum, this should include aquifer description, information on existing or planned aquifer recharge facilities, a map of the well location and other nearby surface water supplies, and physical descriptions of the proposed well(s) (depth, diameter, casing description, etc.). If available, information should be provided on nearby wells (sizes, capacities, yields, etc.), aquifer test results, and if the area is currently experiencing aquifer overdraft or land subsidence.

Well No. 18 will be located in the Salt Lake Valley Aquifer. GHID currently owns 13 water rights totaling 21,266 acre-feet per year in the aquifer. In 2002, the Salt Lake Valley Groundwater Management Plan was approved by the Utah State Engineer to determine safe yields for the aquifer. One determination of this was that the Salt Lake Valley is closed to new water appropriations.

GHID's wells are located in the Northern and Western management regions of the aquifer, which have respective safe yields of 30,000 and 25,000 acre-feet per year. While GHID is not aware of the total use from other agencies that have water rights in those areas, it is GHID's intention to only utilize up to 21,266 acre-feet per year in a year of extreme drought or emergency. Currently, GHID uses approximately 4,000-9,000 acre-feet per year. Based on GHID's recent data, little to no reduction in static



Figure 2 Salt Lake Valley Aquifer Regions and Safe Yields

water level has been recorded and no land subsidence has been noted. Many of GHIDs water rights have priority dates of 1960. If groundwater shortages became apparent, it is possible other water right holders would be curtailed before GHID.

The new 28-inch diameter Well No. 18 will be approximately 1,100 feet deep with the pump at approximately 400 feet. The well casing is anticipated to be 20-inch diameter steel. The static water level will be approximately 100 feet with screened sections starting at 450 feet.

• Please describe the groundwater monitoring plan that will be undertaken and the associated monitoring triggers for mitigation actions.

GHID monitors the pumping rate and yield of each well in its system utilizing a system of sensors and a SCADA system. This includes analyzing the static water level with wells shut off. Static water levels are compared annually to ensure no groundwater mining is taking place. If reductions in pumping level are noted, alternate sites may be used, or groundwater use curtailed and supplemented with JVWCD water sources.

• Describe how the mitigation actions will respond to or help avoid any significant adverse impacts to third parties that occur due to groundwater pumping.

Recharging the aquifer would not be able to be done in the area and is beyond GHID's resources, since GHID does not currently own or treat surface water or participate in reuse. The mitigation plan would be to pump less from the well if pumping the 2,500 acre-feet per year impacts the water level in the aquifer.

E.1.2. Evaluation Criterion B – Drought Planning and Preparedness (20 Points)

Provide a link to the applicable drought plan, and only attach relevant sections of the plan that are referenced in the application, as an appendix to your application. These pages will be included in the total page count for the application.

See Attachment B – GHID Drought Contingency Plan.

Explain how the applicable plan addresses drought. Proposals that reference plans clearly intended to prepare for and address drought will receive more points under this criterion.

GHID participated in the Drought Resiliency Planning process for Jordan Valley Water Conservancy District – their wholesale water provider – in 2021, which inspired GHID to develop their Drought Contingency Plan in 2022 (GHID DCP). The GHID DCP was developed to further evaluate system vulnerabilities and impacts and identify the most effective and efficient mitigation actions that will reduce the impacts of drought in the future. The GHID DCP includes many mitigation measures, such as implementing education, drought tiered rate structures, and water conservation during drought, that GHID plans to implement this year as they address the needs of their customers and the drought impacts.

• Does the drought plan contain drought focused elements including a system for drought monitoring, sector vulnerability assessments related to drought, prioritized mitigation actions, and response actions that correlate to different stages of drought?

Yes. GHID's DCP includes a system for monitoring drought, vulnerabilities by sector, and a list of prioritized mitigation and response actions.

• Explain whether the drought plan was developed with input from multiple stakeholders. Was the drought plan developed through a collaborative process?

GHID originally participated in the drought resiliency planning process for Jordan Valley Water Conservancy District in 2021, which led to the development of their own plan in 2022.

During that process, JVWCD brought together stakeholders and provided opportunities for input and discussion through a Task Force made up of individuals representing municipal and industrial (M&I), agricultural, recreational, and environmental interests. Workshops to present and discuss key milestones in the plan development were held and plan sections were provided for review and comment. Content included a summary of the JVWCD water system, the vulnerability assessment approach and results, the drought monitoring process, and the drought mitigation measures and response actions.

The GHID DCP was developed in 2022 through a collaborative process, including input from a consulting team and a public comment period. GHID worked with a consulting team and evaluated ways to increase drought resiliency. The GHID DCP documents the process used to determine drought monitoring, identify vulnerabilities, risks, mitigation actions/priority projects, and recommendations to improve long-term drought resiliency.

The GHID DCP also utilizes many elements of the Water Conservation and Drought Plan developed by GHID staff, presented in a public work session, and approved in a public Board meeting.

• Does the drought plan include consideration of climate change impacts to water resources or drought? Yes, the GHID DCP includes consideration of climate change impacts to water resources, which can be found on pages 11 and 12.

Describe how your proposed drought resiliency project is supported by an existing drought plan.

The proposed drought resiliency project is a combination of the two highest priority projects identified in the GHID DCP, which can be found on page 18.

- Does the drought plan identify the proposed project as a potential mitigation or response action? Yes, the proposed project is a combination of the two highest priority projects that were identified in GHID's DCP, as seen on page 18. They are projects that were developed from potential mitigation actions that are identified on pages 12 and 13 of the GHID DCP.
- Does the proposed project implement a goal or need identified in the drought plan?
 Yes, the proposed project will implement two of the identified mitigation actions proposed to help reduce the risks identified in table 7-1 on page 12 and 13 of GHID's DCP.
- Describe how the proposed project is prioritized in the referenced drought plan? The proposed Anderson Water Treatment Plant and Well No. 18 are listed as the number 1 and number 2 overall priority projects for drought resiliency, as listed in Table 9-1 on page 17 of the GHID DCP.

E.1.3. Evaluation Criterion C – Sustainability and Supplemental Benefits (15 points)

1. *Climate Change:* E.O. 14008 emphasizes the need to prioritize and take robust actions to reduce climate pollution, increase resilience to the impacts of climate change, protect public health, and conserve our lands, waters, oceans, and biodiversity. Examples in which proposed projects may contribute to climate change adaptation and resiliency, may include but are not limited to the following:

• In addition to drought resiliency measures, does the proposed project include other natural hazard risk reductions for hazards such as wildfires or floods?

As drought conditions continue to worsen in the state of Utah, and the fire season grows longer, water management efforts become much more important. Utah is one of the most wildfire-prone states in the U.S. There are 800 to 1,000 wildfires in Utah annually. **In 2018, there were 1,327 wildfires in Utah with estimated damages of \$13.4 million**. Of

those wildfires, 688 were human caused, either accidental or incendiary, and the remainder were naturally-occurring.

GHID typically receives 18,500 acre-feet per year from JVWCD for its water system through a wholesale contract, and JVWCD also allows GHID to purchase up to 20 percent more water if available. An increase in water source through Well 18 will reduce the need for GHID to purchase additional water from JVWCD, allowing water to stay in the reservoirs for more extended periods and be available to fight wildfires. There are currently 133 reservoirs that hold 99 percent of the State of Utah's water storage, according to the Utah Division of Wildlife Resources. However, due to river sedimentation, which occurs when material being transported by the water gets deposited in riverbeds and reservoirs, this capacity is expected to decrease 25 percent by 2060. River sedimentation not only reduces the reservoir's capacity to hold water but can damage fish habitat. It is also one of the leading concerns for water security across the western United States.

A recent study by Utah State University shows how gravel, sand, and mud move through river systems. This <u>study</u> found that "the predicted rate of water storage loss in Utah's reservoirs does not include sediment from wildfires." This is concerning as wildfires have increased substantially in the past 30 years and have a large impact on sediment yields. Wildfires are expected to continue to increase over the next few decades, further depleting reservoir capacity in Utah.

It is estimated that the proposed project will increase GHID's groundwater supply by 2,500 acre-feet per year. This additional 2,500 acre-feet of groundwater supply will reduce GHID's demand on imported water from JVWCD, and that amount of water can remain in reservoirs and in the river system to help offset the impacts of climate change and wildfires.

• Does the proposed project include green or sustainable infrastructure to improve community climate resilience such as, but not limited to, reducing the urban heat island effect, lowering building energy demands, or reducing the energy needed to manage water? Does this infrastructure complement other green solutions being implemented throughout the region or watershed?

The pump and motor on Well No. 18 will be equipped with a variable frequency drive (VFD) to control the output of the well based on system demands—actual water demand and storage availability. The VFD will lower the energy demand of the pumps. While the main process area for the filters in the water treatment building will require heat, likely gas unit heaters, no cooling will be provided. Instead, passive cooling of the building will occur with the presence of the piped raw and finished water and the filters themselves. This will lower the energy demands of the building. Additionally, all lighting will be provided with LEDS, further reducing the energy demand.

This project will also help offset energy demands by installing a solar system that will produce a renewable energy source at the Anderson Water Treatment Plant. The project will install a 35-kilowatt solar system consisting of eighty-eight solar panels at the Anderson Water Treatment Plant. The proposed solar array will provide approximately 29,053 kilowatt-hours per year that will be used to offset energy demands with the ability to add solar panels in the future.

Both sites – the water treatment plant and Well No. 18 – will be landscaped with locally grown, drought-tolerant species that are easily maintained, but still aesthetically pleasing. This will reduce the water demand for irrigation and the demand for weed control-related chemicals.

• Will the proposed project establish and use a renewable energy source?

A 35-kilowatt system will be installed on the roof of the water treatment plant building as part of the proposed project.

• Does the proposed project seek to reduce or mitigate climate pollutions such as air or water pollution? It is estimated that the proposed solar project will result in 852,812 pounds of coal saved per year. The environmental impact will be equivalent to:



Figure 3 Environmental Benefits

In addition, the water treatment plant will remove ammonia through oxidation, and it will remove, through filtration, iron and manganese in the water.

• Will the proposed project reduce greenhouse gas emissions by sequestering carbon in soils, grasses, trees, and other vegetation?

No. While landscaping is planned for the water treatment plant and Well No. 18, the vegetation planted will not be substantial.

- Does the proposed project have a conservation or management component that will promote healthy lands and soils or serve to protect water supplies and its associated uses?
 Yes, the proposed project has a water management component that will help protect water supplies. Additionally, site landscaping will be designed to use local and xeric, drought-tolerant plants.
- Does the proposed project contribute to climate change resiliency in other ways not described above? It adds a drought-resilient, local source to GHID's supply portfolio. In the event of calamitous weather or earth driven catastrophe – earthquake, fire, etc. – having water infrastructure supported by its own crews with minimal transmission lines is a more resilient solution.

2. Disadvantaged or Underserved Communities: E.O. 14008: Tackling the Climate Crisis at Home and Abroad directs Federal agencies to assess potential benefits to disadvantaged communities as part of funding allocation processes. Please describe in detail how the community is disadvantaged or underserved based on a combination of variables that may include the following:

- Low income, high and/or persistent poverty
- High unemployment and underemployment
- Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities
- Linguistic isolation
- High housing cost burden and substandard housing
- Distressed neighborhoods
- High transportation cost burden and/or low transportation access
- Disproportionate environmental stressor burden and high cumulative impacts
- Limited water and sanitation access and affordability
- Disproportionate impacts from climate change
- High energy cost burden and low energy access
- Jobs lost through energy transition
- Access to healthcare

The GHID service area encompasses West Valley City, a disadvantaged community with a Median Adjusted Gross Income (MAGI) of \$36,400, well below the Utah average MAGI of \$46,500 – https://deq.utah.gov/drinking-water/magi-by-city. According to recent census data, 11.7 percent of West Valley City residents are living in poverty, which is significantly higher than the Statewide poverty percentage of 7.3 percent. Roughly 20 percent of the City's population are persons living without health insurance compared to only 10.8 percent of the Statewide population. One factor that could be contributing to the lack of individuals covered by health insurance could be the significant housing cost burden that residents of Utah and Salt Lake County specifically are facing. According to the National Low-Income Housing Coalition, "Across Utah, there is a shortage of rental homes affordable and available to extremely low-income households (ELI), whose incomes are at or below the poverty guideline or 30% of their area median income (AMI). Many of these households are severely cost burdened, spending more than half of their income on housing. Severely cost burdened poor households are more likely than other renters to sacrifice other necessities like healthy food and healthcare to pay the rent, and to experience unstable housing situations like evictions."

West Valley City residents are not only making less money and seeing high housing cost burdens. According to data published by USDOT, every census tract located within West Valley City is considered disadvantaged in at least two categories and several of the census tracts qualify as disadvantaged in 5 categories or more. These category indicators include: Historically disadvantaged, Transportation, Health, Economic, Equity, Resilience, and Environmental. See Attachment C – West Valley Disadvantaged Community Maps.

3. Tribal Benefits: The Department of the Interior is committed to strengthening tribal sovereignty and the fulfillment of Federal tribal trust responsibilities. The President's memorandum, "Tribal Consultation and Strengthening Nation-to-Nation Relationships," asserts the importance of honoring the Federal government's commitments to Tribal Nations.

The proposed project does not provide any tribal benefits.

4. Environmental Benefits: Drought resiliency projects often provide environmental benefits in addition to water supply reliability benefits for other users. Ecological resiliency is crucial to sustain ecosystems that can respond to and recover from external stressors resulting from climate change and drought.

- Does the project seek to improve ecological climate change resiliency of a wetland, river, or stream to benefit to wildlife, fisheries, or habitats? Do these benefits support an endangered or threatened species? If JVWCD water use is reduced by fully utilizing available groundwater, it is possible to allow additional water to contribute to in-stream flows in the lower Provo River. This can help aid in the recovery of the June Sucker, a threatened species found only in Utah with the June Sucker Recovery Implementation Program. Lower stream and groundwater flows and altered runoff patterns during drought can severely impact ecosystems that rely on surface and groundwater. They can damage habitat and alter natural lifecycles. Water quality degradation due to drought can also cause adverse impacts to ecosystems. For example, the lower Provo River is designated as a critical habitat for the June Sucker, an endangered species endemic to Utah Lake. The June Sucker exists nowhere else and can live to be 40 years old, according to the Utah Lake Commission. Current recovery projects for this species are closely related to the water quality, quantity, and hydrology of Utah Lake and its tributaries.
- What are the types and quantities of environmental benefits provided, such as the types of species and the numbers benefited, acreage of habitat improved, restored, or protected, or the amount of additional stream flow added? How were these benefits calculated?

The use of an additional 2,500 acre-feet per year of groundwater could assist in returning a similar amount to the lower Provo River and Utah Lake.

- Will the proposed project reduce the likelihood of a species listing or otherwise improve the species status? The June Sucker has already been removed from the Endangered category and moved to the Threatened category.
- 5. Other Benefits: Will the project address water sustainability in other ways not described above? For example:
 - Will the project assist States and water users in complying with interstate compacts? No.
 - Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)?

Yes, the project will benefit municipal and industrial users by making more water available during drought times and providing redundancy within the system.

• Will the project benefit a larger initiative to address sustainability of water supplies? The project will reduce the need to purchase additional water from JVWCD to use in the GHID water system, as it allows for more water supply from their existing water rights.

E.1.4. Evaluation Criterion D – Severity of Actual or Potential Drought Impacts to be Addressed by the Project (15 Points)

What are the ongoing or potential drought impacts to specific sectors in the project area if no action is taken (e.g., impacts to agriculture, environment, hydropower, recreation and tourism, forestry), and how severe are those impacts? Impacts should be quantified and documented to the extent possible. For example, impacts could include, but are not limited to:

• Whether there are public health concerns or social concerns associated with current or potential drought conditions (e.g., water quality concerns including past or potential violations of drinking water standards, increased risk of wildfire, or past or potential shortages of drinking water supplies? Does the community have another water source available to them if their water service is interrupted?).

Utah Lake is the third-largest freshwater lake in the United States west of the Mississippi and is used as a main supply source for secondary systems in the project area. Adverse impacts to the water quality in the lake continue to occur with increasing temperatures and declining water levels and have appeared in the form of algae blooms in recent years. This is a concern particularly when reservoir levels are low during dry periods. Exposure to high levels of blue-green algae and their toxins can cause **diarrhea**, **nausea or vomiting; skin, eye or throat irritation; and allergic reactions or breathing difficulties**. Pollution has also been a contributing factor to the water quality of the lake. Raw sewage was dumped into the lake as late as 1967. Pollution problems still remain today, and the lake's phosphorus and mineral salt levels are in violation of the Clean Water Act.



Figure 4 Utah Lake

Since July 13, 2016, the Utah Poison Control Center has received 566 calls related to the Utah Lake algal bloom. Of these, 465 were from persons reporting or seeking information about human exposures, 26 were from persons reporting or seeking information about animal

exposures, and 75 were for general information only. Of the human exposure calls, approximately 30 percent of callers reported some adverse effects. These include gastrointestinal symptoms – nausea, vomiting, diarrhea – headache, and eye and skin irritation. The animal exposure calls included dogs, cats, birds, and horses. The calls came from a wide range of locations, including Utah, Salt Lake, Davis, Carbon, Millard, Sanpete, Summit, Tooele, and Washington Counties in Utah, as well as from the states of Colorado, Florida, Washington, and Wyoming.

• Whether there are ongoing or potential environmental impacts (e.g., impacts to endangered, threatened or candidate species or habitat).

Lower stream and groundwater flows and altered runoff patterns during drought can severely impact ecosystems that rely on surface and groundwater. They can damage habitat and alter natural lifecycles. Water quality degradation due to drought can also cause adverse impacts to ecosystems. For example, the lower Provo River is designated as a critical habitat for the June Sucker, an endangered species endemic to Utah Lake. The June Sucker exists nowhere else and can live to be 40 years old, according to the Utah Lake Commission. Current recovery projects for this species are closely related to the water quality, quantity, and hydrology of Utah Lake and its tributaries.

- Whether there are local or economic losses associated with current drought conditions that are ongoing, occurred in the past, or could occur in the future (e.g., business, agriculture, reduced real estate values). The water level in Utah's Great Salt Lake is declining at record pace, brought on by decades of drought and diversions from its tributaries that feed water to lawns and fields in northern Utah. In a recent City Council meeting, Laura Vernon, the Great Salt Lake coordinator fourth Utah Division of Forestry, Fire and State Lands explained, "If the lake dries up, that's bad news for the birds and business. The economic costs of the lake drying up another 10 feet from now range between \$1.69 billion to \$2.17 billion, including \$1.3 billion from lost mineral extraction, \$81 million in lost recreation, and \$67 million from the lost brine shrimp industry. It could also cost up to a half-billion dollars in environmental and health costs associated with more dust in the area because even a decrease of about 8 feet can result in 30 miles of newly exposed lakebed."
- Whether there are other drought-related impacts not identified above (e.g., tensions over water that could result in a water-related crisis or conflict).

Approximately 80 percent of GHID's water supply is purchased from Jordan Valley Water Conservancy District who is facing major water supply issues due to the extended drought and limited resources. Utah reservoirs stand at approximately 63 percent full as of May 26, 2022. These water supply shortages throughout the state have increased GHID's determination to improve its supply and groundwater quality in order to reduce its drought vulnerabilities.

Describe existing or potential drought conditions in the project area.

• Is the project in an area that is currently suffering from drought or which has recently suffered from drought? Please describe existing or recent drought conditions, including when and the period of time that the area has experienced drought conditions (please provide supporting documentation, [e.g., Drought Monitor, droughtmonitor.unl.edu]).

Utah has experienced periods of prolonged drought for many years. The lengthy droughts of the 1930s and 1950s caused significant economic problems for the state. While the drought of 1976-77 was not as long, the consequences were still intense and costly. In 2016, after several years of drought conditions that started in 2012, Utah Lake dropped to levels causing the Utah State Engineer to prohibit diversions of more than 100,000 acre-feet (AF) of secondary storage rights – junior water right holders – in Utah Lake. The low water levels also intensified a widespread algal bloom in Utah Lake, prompting public health advisories. Declining water levels and algal blooms caused by drought conditions are a chronic issue. Even more concerning, the recently completed Weber River and Bear River tree-ring stream flow reconstructive studies and JVWCD's *Preparing for Climate Change—A Management*

Plan forecast the likelihood of much more severe and longer-term droughts in the future.

On April 21st, 2022, Utah Governor Spencer J. Cox declared a state of emergency due to the dire drought conditions affecting the entire state. According to the Utah Department of Natural Resources, as of April 2022, 99.39 percent of the state is in severe drought or worse, with 43.46 percent of Utah in extreme drought, and snowpack was only at 75 percent of normal. Nineteen of Utah's largest 45 reservoirs are below 55 percent of available capacity. Overall statewide storage is 59 percent of capacity. Of the 94 measured streams, 59 were flowing below normal despite spring runoff. Two streams were flowing at record low conditions.

The National Integrated Drought



Information System (NIDIS) tracks historical as well as current drought conditions. As of May 31, 2022, 100 percent of West Valley City and 98.87 percent of Salt Lake County are in Extreme Drought conditions. Figure 5 above shows the current drought conditions for Salt Lake County, obtained from the Utah Department of Natural Resources and the National Drought Mitigation Center at the University of Nebraska-Lincoln.

• Describe any projected increases to the severity or duration of drought in the project area resulting from changes to water supply availability and climate change. Provide support for your response (e.g., reference a recent climate informed analysis, if available).

Drought conditions continue to persist in the state of Utah after another winter along the Wasatch Front without adequate snow/water. Residents of West Valley City will have to significantly reduce outdoor watering in order to preserve reservoir storage in case the drought persists through more winter seasons. While Utah, and much of the western United States, hope for more snowpack in 2022-2023, climate change projections generally indicate a reduction in snow in future years. Snowpack has become an unreliable source of water, increasing the need for more water storage and well production.

E.1.5. Evaluation Criterion E – Project Implementation (10 Points)

Describe the implementation plan of the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates. Milestones may include, but are not limited to, the following: design, environmental and cultural resources compliance, permitting, construction/installation.

Major Task	Start Date	End Date
Environmental and Preliminary Design	Spring 2023	Fall 2023
Design and Permitting	Fall 2023	Spring 2024
Bid and Advertise	Spring 2024	Spring 2024
Construction	Summer 2024	Winter 2025
Final Project Reporting and Project Closeout	Spring 2026	Spring 2026

Table 1 Project Implementation Schedule

Describe any permits that will be required, along with the process for obtaining such permits.

The Utah Division of Drinking Water will require a construction permit for the Anderson Water Treatment Plant, and Well No. 18. GHID will also need a well drilling permit from the Utah Division of Drinking Water. The drilling plans need to be submitted to receive the permit. The applications for the permits will be submitted during the design process. No issues are expected for either permit.

The proposed project will require West Valley City (WVC) permits for potential roadway excavation, and a standard building permit for the water treatment plant and well house. WVC will require approval from their Planning and Zoning and Engineering Departments. The applications for the permits will be submitted during the design process. The approvals from the City will be sought during the design process. No issues are anticipated for either permits or the approvals.

Identify and describe any engineering or design work performed specifically in support of the proposed project.

In the face of aging infrastructure, recurring droughts, and growing future demand from changes in use, GHID is continually engaged in extensive planning efforts and construction activities on its drinking water system. These planning efforts, including the 2019 Water Quality Scoping Study, 2022 Drinking Water Master Plan, and 2022 Drought Contingency Plan, assess existing infrastructure, estimate future demand, and propose and prioritize capital projects. As a result, a new water treatment plant (Rushton) and well upgrades at Well No. 12 are in construction in 2022. The 2019 Water Quality Scoping Study covered some pre-design aspects of the water treatment plant that they expect to use as the basis of design for the new Anderson Water Treatment Plant. A study is underway to determine the best location for the new Well No. 18, but no recommendations or design work has been completed. The Water Master Plan discusses the need for these projects in general but does not include design or engineering work.

Describe any new policies or administrative actions required to implement the project.

There are no required policies or administrative actions required to implement the project. The GHID Board will approve the Drinking Water Master Plan and the Drought Contingency Plan on June 21, 2022, and they have prepared, modeled, and prioritized the projects under the Board's direction during a public meeting.

E.1.6. Evaluation Criterion F – Nexus to Reclamation (10 Points)

Describe the nexus between the proposed project and a Reclamation project or Reclamation activity. Please consider the following:

- Does the applicant have a water service, repayment, or O&M contract with Reclamation? The applicant does not have a water service, repayment, or O&M contract with Reclamation.
- If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means?
 GHID receives roughly 80 percent of its annual water supply from Jordan Valley Water

Conservancy District, who receives a large portion of water from the Central Utah Project, a Reclamation Project.

• Will the proposed work benefit a Reclamation project area or activity?

The proposed project will benefit Reclamation's Central Utah Project by reducing GHID's dependence on JVWCD supplied water during drought years. GHID's additional supply will allow other stakeholders to receive the JVWCD water that was previously allotted to GHID.

• Is the applicant a Tribe? No, GHID is not a tribe.

Project Budget

Funding Plan and Letters of Commitment

Describe how the non-Federal share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability.

GHID will use either its reserve account or bond proceeds to fund the non-Federal share of project costs. The expectation is that GHID will have the funds available within its reserve account for this project.

Please identify the sources of the non-Federal cost share contribution for the project, including:

• Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments).

GHID will use funds from their reserve account, impact fees, and bond proceeds.

- Any costs that will be contributed by the applicant.
 All internal staff costs incurred by Granger-Hunter Improvement District will be contributed by the applicant. This includes oversight, procurement, and design and construction management.
- Any third-party in-kind costs (i.e., goods and services provided by a third party). N/A.
- Any cash requested or received from other non-Federal entities. N/A.
- Any pending funding requests (i.e., grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied.

As stated above, GHID will be using their reserve account and impact fees.

In addition, please identify whether the budget proposal includes any project costs that have been or may be incurred prior to award. For each cost, describe:

• The project expenditure and amount.

N/A.

- The date of cost incurrence. N/A.
- How the expenditure benefits the project. N/A.

Budget Proposal

Table 2 – Total Project Cost Summary

Source	Amount
Costs to be reimbursed with the requested Federal funding	\$5,000,000
Costs to be paid by the applicant	\$8,410,000
Value of third-party contributions	\$0
Total Project Cost	\$13,410,000

Table 3 – Non-Federal and Federal Funding Sources Summary

nding Sources Amount		
Non-Federal Entities		
1. GHID Reserve Account	\$8,410,000	
Non-Federal Subtotal	\$8,410,000	
Requested Reclamation Funding	\$5,000,000	

Table 4 – Budget Proposal

Budget Item	Computation			Total		
Description	Quantity	Unit Cost	Quantity Type	Cost		
Salaries and Wages	\$0.00					
Fringe Benefits				\$0.00		
Travel				\$0.00		
Equipment				\$0.00		
Supplies and Materials				\$0.00		
Contractual/Construction				\$13,370,000		
Design	1	\$848,000	EA	\$848,000		
Construction	1	\$636,000	EA	\$636,000		
Engineering						
Geotechnical	1	\$40,000	EA	\$40,000		
Engineering						
Mobilization	1		EA	\$495 <i>,</i> 000		
Permitting	1	\$99,060	EA	\$99 <i>,</i> 060		
Materials Testing	1	\$49,530	EA	\$49 <i>,</i> 530		
Startup and	1	\$49,530	EA	\$49,530		
Commissioning						
Land Acquisition/ROW	1	\$75,000	Acre	\$75 <i>,</i> 000		
Area						
Years of Price Escalation	2	\$530,000	5%	\$1,060,000		
Site Work	1	\$1,060,000	EA	\$261,722		
Yard Piping	1	\$261,722	EA	\$1,121,000		
Building and Structural	1	\$1,121,000	EA	\$2,245,000		
Electrical, Controls and	1	\$2,245,000	EA	\$895 <i>,</i> 050		
Instrumentation						
Filtration Equipment	1	\$895,050	EA	\$1,287,000		
Process Equipment	1	\$1,287,000	EA	\$1,115,000		
Well Drilling	1	\$1,115,000	EA	\$1,007,380		
Well Equipping	1	\$1,007,380	EA	\$1,473,200		
Utilities	1	\$1,473,200	EA	\$500,000		
Solar Array	1	1 \$500,000 EA		\$112,000		
Other				\$40,000		
Environmental				\$40,000		
Total Direct Costs				\$13,410,000		
Indirect Costs						
Type of rate	Percentage	\$base		\$0		
T	otal Esti <u>mated I</u>	Project Costs		\$13,410,000		

Budget Narrative

Salaries and Wages

No GHID staff salaries or wages are included in the project budget. All services will be contracted. The City's staff time will be over and above the project's cost.

Fringe Benefits

No fringe benefits will be required.

Travel

No travel will be necessary.

Equipment

Equipment will be included in the contracted portion of the project.

Materials and Supplies

Materials and supplies will be included in the contracted portion of the project and documented as required.

Contractual

To determine unit costs included in the cost estimate for this project, GHID relied upon the 2022 GHID Drinking Water Master Plan and Impact Fee Facilities Plan. Contract unit prices from similar projects recently completed were used by the engineering firm to estimate those costs. GHID followed its procurement process and procured consulting services before applying for these funds. They will bid the construction portion of the project to several prequalified construction companies. The contractual costs are estimates for each component to build the water treatment plant, well, and well pump station. Generally, the low bidder will be selected based on a determination of acceptable qualifications.

Third-Party In-Kind Contributions

No third-party in-kind contributions are included.

Environmental and Regulatory Compliance Costs

It is expected to take \$40,000 to evaluate the required information, prepare the report, and update any changes required from Reclamation. The cost is based on past project environmental reviews. However, if Reclamation considers this project possible for a categorical exclusion (CE), Reclamation could prepare the CE as they have in the past.

Other Expenses

No other expenses are included.

Indirect Costs

No indirect costs are included.

Total Costs

Applicant: \$8,410,000

Reclamation: \$5,000,000

Total: \$13,410,000

Environmental and Cultural Resources Compliance

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

Impacts will be those associated with building a water treatment plant and well house and installing HDPE or PVC connecting pipe.

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

GHID is not aware of any impacts concerning threatened or endangered species in this area. The areas are all previously disturbed and very urban.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?" If so, please describe and estimate any impacts the proposed project may have.

GHID is not aware of any impacts to wetlands in this area.

When was the water delivery system constructed?

The GHID water system was built beginning in the 1950s, with large periods of expansion in the 1970s and 1980s.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

No.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

No. According to the National Register of Historic Places, there are no locations listed in West Valley City. However, a cultural resource inventory will be completed as part of the submitted environmental document.

Are there any known archeological sites in the proposed project area?

GHID is not aware of any impacts to or locations of archeological sites.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations? No, the proposed project will not have a disproportionately high and adverse effect on low income or minority populations.

Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

No, the proposed project will not limit access to or impact tribal lands.

Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or nonnative invasive species known to occur in the area?

No, the proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native species.

Required Permits and Approvals

Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.

The Utah Division of Drinking Water will require a construction permit for the water treatment plant and Well No. 18. GHID will also need a well drilling permit from the Utah Division of Drinking Water. The drilling plans need to be submitted to receive the permit. The applications for the permits will be submitted during the design process. No issues are expected for either permit. The proposed project will require West Valley City (WVC) permits for potential roadway excavation, and a standard building permit for the water treatment plant and well house. WVC will require approval from their Planning and Zoning and Engineering Departments. The

applications for the permits will be submitted during the design process. The approvals from the City will be sought during the design process. No issues are expected for either the permits or the approvals.

Existing Drought Contingency Plan

If there is an existing drought contingency plan addressing the relevant geographic area, please attach a copy (or relevant sections) of the existing plan. (Note, this will not count against the application page limit.)

Yes, please see Attachment B – GHID Drought Contingency Plan.

Letters of Project Support and Letters of Partnership

Please include letters from interested stakeholders supporting the proposed project. To ensure your proposal is accurately reviewed, please attach all letters of support/ partnership letters as an appendix. Letters of support received after the application deadline for this NOFO will not considered in the evaluation of the proposed project.

A Letters of support from Jordan Valley Water Conservancy District (JVWCD) can be found in Attachment D – JVWCD Support Letter

Official Resolution

Include an official resolution adopted by the applicant's board of directors or governing body, or, for State government entities, an official authorized to commit the applicant to the financial and legal obligations associated with receipt of a financial assistance award under this NOFO

The Official Resolution for GHID will be submitted within 30 days of the application deadline.

Overlap or Duplication of Efforts Statement

Applicants must provide a statement that addresses if there is any overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. If any overlap exists, applicants must provide a description of the overlap in their application for review.

Applicants must also state if the proposal submitted for consideration under this program is or is not in any way duplicative of any proposal or project that has been or will be submitted for funding consideration to any other potential funding source—whether it be Federal or non- Federal. If such a circumstance exists, applicants must detail when the other duplicative proposal(s) were submitted, to whom (Agency name and Financial Assistance program), and when funding decisions are expected to be announced. If at any time a proposal is awarded funds that would be duplicative of the funding requested from Reclamation, applicants must notify the NOFO point of contact or the Program Coordinator immediately.

The proposed project has no overlap or duplication of efforts.

Conflicts of Interest Disclosure

Per the Financial Assistance Interior Regulation (FAIR), 2 CFR §1402.112, applicants must stat in their application if any actual or potential conflict of interest exists at the time of submission.

There are no existing or potential conflicts of interest for the proposed project.

Uniform Auditing Reporting Statement

All U.S. states, local governments, federally recognized Indian Tribal governments, and non- profit organizations expending \$750,000 in U.S. dollars or more in Federal award funds in the applicant's fiscal year must submit a Single Audit report for that year through the Federal Audit Clearinghouse Internet Data Entry System in accordance with 2 CFR §200 subpart F. U.S. state, local government, federally recognized Indian tribal government, and non-profit applicants must state if your organization was or was not required to submit a Single Audit report for the most recently closed fiscal year. If your organization was required to submit a Single Audit report for the most recently closed fiscal year, provide the Employer Identification Number (EIN) associated with that report and state if it is available through the Federal Audit Clearinghouse

website.

In 2021 GHID expended more than \$750k (SRF Loan), and GHID plans on expending more than \$750k in 2022 and 2023. GHID submitted a single audit to Federal Audit Clearing House on 5/24/2022 for calendar year 2021. Attached is the total audit report for 2021 which includes the single audit that GHID auditors performed in 2021. Please see Attachment E Single Audit

Certification Regarding Lobbing

Applicants requesting more than \$100,000 in Federal funding must certify to the statements in 43 CFR Part 18, Appendix A-Certification Regarding Lobbying. If this application requests more than \$100,000 in Federal funds, the Authorized Official's signature on the appropriate SF- 424, Application for Federal Assistance for also represents the entity's certification of the statements in 43 CFR Part 18, Appendix A. Please see the attached certification regarding lobbying form gg.



GHID SERVICE AREA/WEST VALLEY CITY PROJECT LOCATION



June 2022

WaterSMART: Drought Resiliency Project Grant



GHID SERVICE AREA/WEST VALLEY CITY PROJECT DETAIL





WaterSMART: Drought Resiliency Project Grant

801.565.4300 fax 801.565.4399 jvwcd.org

8215 South 1300 West West Jordan, UT 84088



May 26, 2022

Jason Helm, General Manager 2888 South 3600 West West Valley City, Utah 84119

Dear Jason,

As the wholesale water supply agency serving Granger Hunter Improvement District (GHID), Jordan Valley Water Conservancy District (JVWCD) is pleased to support GHID's grant application being submitted to The Bureau of Reclamation for a WaterSMART: Drought Resiliency Projects Grant. We appreciate your efforts to increase your system's resilience to the impacts of the ongoing drought.

Various studies indicate that in the future the region may experience more severe and/or more frequent droughts than droughts of historical record. It will be important for JVWCD and its member agencies to take preemptive actions to become more resilient against drought conditions.

We support your grant application and appreciate the opportunity to serve GHID.

Sincerely,

avon G. Forsyth

Barton A. Forsyth, P.E. General Manager/CEO Jordan Valley Water Conservancy District



Gary K. Keddington, CPA Marcus K. Arbuckle, CPA Steven M. Rowley, CPA

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF THE FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Board of Trustees Granger-Hunter Improvement District

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in the *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Granger-Hunter Improvement District (the District) as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise the District's basic financial statements, and have issued our report thereon dated May 10, 2022.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statements amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Keddington & Christensen

Keddington & Christensen, LLC Salt Lake City, Utah May 10, 2022



INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR PROGRAM AND ON INTERNAL CONTROL OVER COMPLIANCE REQUIRED BY THE UNIFORM GUIDANCE

Gary K. Keddington, CPA Marcus K. Arbuckle, CPA Steven M. Rowley, CPA

To the Board of Trustees Granger-Hunter Improvement District

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited Granger-Hunter Improvement District's (the District) compliance with the types of compliance requirements identified as subject to audit in the *OMB Compliance Supplement* that could have a direct and material effect on each of the District's major federal programs for the year ended December 31, 2021. The District's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

In our opinion, Granger-Hunter Improvement District complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended December 31, 2021.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Our responsibilities under those standards and the Uniform Guidance are further described in the Auditor's Responsibilities for the Audit of Compliance section of our report.

We are required to be independent of the District and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the District's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules, and provisions of contracts or grant agreements applicable to the District's federal programs.

Auditor's Responsibility for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the District's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from

3

fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the District's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with generally accepted auditing standards, *Government Auditing Standards*, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the District's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the District's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the Auditor's Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the Granger-Hunter Improvement District as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise the District's basic financial statements. We have issued our report thereon dated May 10, 2022, which contained unmodified opinions on those financial statements. Our audit was performed for the purpose of forming our opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance, and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

K&C. CPAs

Salt Lake City, Utah May 10, 2022

GRANGER-HUNTER IMPROVEMENT DISTRICT SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS For The Year Ended December 31, 2021

	Pass-Through					
Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Entity Identifying Number	Pa Thro Subre	assed ough to ccipients_	To Ex	tal Federal penditures
Environmental Protection Agency						
Passed through State of Utah - Capitalization Grants for Drinking Water State Revolving Funds	66.468	FS-99878418	\$	-	\$	1,554,040
Total Environmental Protection Agency						1,554,040
Total Expenditures of Federal Awards			\$	-	\$	1,554,040

GRANGER-HUNTER IMPROVEMENT DISTRICT NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS For the Year Ended December 31, 2021

NOTE 1 BASIS OF PRESENTATION

The accompanying schedule of expenditures of federal awards (the Schedule) includes the federal award activity of Granger-Hunter Improvement District (the District) under programs of the federal government for the year ended December 31, 2020. The information in this Schedule is presented in accordance with the requirements of Title 2 U.S. Code of Federal Regulations Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of the District, it is not intended to and does not present the financial position, change in net position, or cash flows of the District.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

NOTE 3 INDIRECT COST RATE

The District has elected not to use the 10% de minimis indirect cost rate allowed under the Uniform Guidance.

GRANGER-HUNTER IMPROVEMENT DISTRICT SCHEDULE OF FINDINGS AND QUESTIONED COSTS For the Year Ended December 31, 2021

A. SUMMARY OF AUDITOR'S RESULTS

Financi	al Statements	
1.	Type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP:	Unmodified
2.	Internal control over financial reporting: a. Material weakness(es) identified? b. Significant deficiency(ies) identified?	No None reported
3.	Noncompliance material to financial statements noted?	No
Federal	Awards	
1.	Internal control over financial reporting: a. Material weakness(es) identified? b. Significant deficiency(ies) identified?	No None reported
2.	Type of auditor's report issued on compliance for major federal	Unmodified
2.	Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	No
4.	Identification of major federal program:	
	<u>CFDA Number</u> 66.468	Name of federal <u>Program or Cluster</u> Capitalization Grants for Drinking Water
5.	Dollar threshold used to distinguish between type A and type B programs:	\$750,000
6.	Auditee qualified as low-risk auditee?	Yes

B. FINDINGS - FINANCIAL AUDIT AND GOVERNMENT AUDITING STANDARDS

None Noted

C. FINDINGS – MAJOR FEDERAL AWARDS PROGRAM

None Noted



Steven M. Rowley, CPA

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE AND REPORT ON INTERNAL CONTROL OVER COMPLIANCE AS REQUIRED BY THE *STATE COMPLIANCE AUDIT GUIDE*

To the Board of Trustees Granger-Hunter Improvement District

Report On Compliance

We have audited Granger-Hunter Improvement District's compliance with the applicable state compliance requirements described in the *State Compliance Audit Guide*, issued by the Office of the Utah State Auditor that could have a direct and material effect on the District for the year ended December 31, 2021.

State compliance requirements were tested for the year ended December 31, 2021 in the following areas:

Budgetary Compliance Fraud Risk Assessment Fund Balance Government Fees

Management's Responsibility

Management is responsible for compliance with the state requirements referred to above.

Auditor's Responsibility

Our responsibility is to express an opinion on the District's compliance based on our audit of the state compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States; and the *State Compliance Audit Guide*. Those standards and *the State Compliance Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the state compliance requirements referred to above that could have a direct and material effect on the state compliance requirement occurred. An audit includes examining, on a test basis, evidence about the District's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each state compliance requirement referred to above. However, our audit does not provide a legal determination of the District's compliance with those requirements.

Opinion on Compliance

In our opinion, Granger-Hunter Improvement District, complied, in all material respects, with the state compliance requirements referred to above for the year ended December 31, 2021.

Telephone (801) 590-2600 Fax (801) 265-9405 1455 West 2200 South, Suite 201 Salt Lake City, Utah 84119

REPORT ON INTERNAL CONTROL OVER COMPLIANCE

Management of the District is responsible for establishing and maintaining effective internal control over compliance with the state compliance requirements referred to above. In planning and performing our audit of compliance, we considered the District's internal control over compliance with the state compliance requirements referred to above to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance with those state compliance requirements and to test and report on internal control over compliance in accordance with the *State Compliance Audit Guide*, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the District's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent or to detect and correct noncompliance with a state compliance requirement on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a state compliance requirement will not be prevented or detected and corrected on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a state compliance that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control and compliance and the results of that testing based on the requirements of the *State Compliance Audit Guide*. Accordingly, this report is not suitable for any other purpose.

Keddington & Christensen

Keddington & Christensen, LLC Salt Lake City, Utah May 10, 2022