



## MINUTES BOARD OF TRUSTEES PUBLIC MEETING

Meeting date: August 4, 2025  
Time: 6:00 pm  
Location: 533 East Water Works Drive, St. George Utah 84770  
Participants: Board members Ed Bowler, Rick Rosenberg, Clark Fawcett, Adam Bowler, Victor Iverson, Michele Randall, and Kress Staheli. District staff include Zach Renstrom, general manager; Mindy Mees, secretary; Jodi Richins, general counsel; and Brie Thompson and Corey Cram, associate general managers. Other meeting attendees as noted on the attached sign-in sheet.

Board Chair Ed Bowler welcomed members of the public and called the meeting to order.

### Water supply update

Associate General Manager Brie Thompson presented a water supply update.

**Cumulative precipitation.** Ms. Thompson presented a slide that shows cumulative precipitation beginning in October 2024, which marks the start of the current water year. The slide compares the area's current conditions with both the highest and lowest years on record. The current year is tracking very close to the lowest year on record and is well below average precipitation levels for this time of year.

**Soil moisture.** Ms. Thompson showed a map that displayed soil moisture conditions across Utah, Nevada, and Arizona, including conditions within Washington County's boundary. Orange and red colors on the map indicate drier soils, while blue indicates wetter soils. The Kolob area and the northwest part of the county are showing some of the driest conditions on record, which are drier than 98% of historical observations. However, there are some isolated wetter areas near the airport, likely due to recent rainfall. The gray areas indicate average conditions, which are still present in parts of the county.

**Virgin River Flow.** Ms. Thompson presented information regarding historical measurement of flows in the Virgin River near the town of Virgin, using data from the USGS. The slide shows several low-flow years, including 2014, 2021, and 2025. The slide shows spikes in previous years caused by monsoonal activity, but there have not been monsoon spikes yet this year.

**Water Production.** Ms. Thompson presented a chart that shows year-to-date water production through June for both the District and its municipal partners. June water use is comparable to 2021, even though the district now serves 17% more Equivalent Residential Connections (ERCs). Despite that increase in connections, total water use has only gone up 6%, which reflects a 9% decrease in water use per ERC between 2021 and 2025.

**Reservoir Storage.** Ms. Thompson presented a graph illustrating combined reservoir levels for Sand Hollow and Quail Creek. The District's current storage is very similar to 2021. Historically, the area sees the lowest reservoir levels in October after the summer drawdown. A similar trend is reflected at Gunlock Reservoir, with levels tracking along typical seasonal patterns.

Ms. Thompson explained that conditions across the county remain dry. However, the community's water conservation efforts have made a measurable impact. Even with growth in population and service connections, water use per connection is down, helping preserve storage in our reservoirs.

### **Presentation on pool analysis**

In response to a board request in a previous board meeting, Conservation Manager Doug Bennett presented a detailed analysis of swimming pools in Washington County. Mr. Bennett shared the following information:

#### **Current Pool Statistics**

- There are approximately 9,057 residential pools countywide, with about half in St. George.
- No jurisdictions track pool sizes, so a detailed study was conducted using permit data and aerial imagery.
- Sample of 300 pools 20% of 1,500 permits from 2020–2023 in St. George was used to analyze size and estimated value.

#### **Pool Size & Water Use**

- Average pool size: 605 sq ft | Median: 571 sq ft.
- Larger pools skew the average upward, which suggests a growing trend in building "super pools" over 800 sq ft.
- Average water use: 30,000 gallons/year per pool (only evaporation considered; actual use may be higher due to leaks).
  - 400 sq ft = ~22,000 gallons/year
  - 500 sq ft = ~28,000 gallons/year
  - +100 sq ft adds ~6,000 gallons/year

#### **Annual Pool Construction & Water Demand**

- An estimated 775 new pools are built annually, adding 25 million gallons/year to water demand.
- Cumulatively, 94 million gallons/year could be saved by 2040 if a 500 sq ft pool size cap were implemented.

#### **Impact of Potential Size Caps**

##### **Size Limit % Pools Affected Annual Water Savings 2040 Projected Savings**

500 sq ft	64%	6.25 million gal	94 million gal
600 sq ft	45%	5.5 million gal	60 million gal
700 sq ft	30%	3.5 million gal	38 million gal

**Existing pools** use ~250–300 million gallons/year, or 1.6% of total water supply, equal to water for ~1,600 homes.

#### **Economic Findings**

- Pool construction contributes 0.5% of Washington County's GDP.
- Reducing pool size may affect higher-end custom pool spending, but most value is retained in smaller pools.
- No strong link found between extremely large pools and higher property values.
- Maintenance industry (chemicals, pool supplies) unlikely to be significantly impacted by size limits.

Mr. Bennett explained that lawn size is already capped across the region, but pools currently have no size limits, and evaporation from pools mirrors lawn water use; both are consumptive and should be managed similarly. Mr. Bennett suggested that the effects of allowing larger pools can be mitigated by requiring water-saving features, such as automated mechanical covers, which are more likely to be used than manual ones.

Trustee Victor Iverson commented that there really are not many other communities that the District can use to directly compare itself to in terms of water conservation. Trustee Iverson asked whether, aside from Las Vegas, there are other communities the District might evaluate for comparison purposes.

Mr. Bennett responded that he is not aware of other communities that have implemented similar limitations. Historically, it had not been a significant issue in Las Vegas until the arrival of wealthy residents led to the development of extremely large swimming pools that were essentially private water parks on residential properties. Traditionally, most residential pools were in the range of 400 to 600 square feet. However, the trend toward much larger pools created an unforeseen problem. The scale of water used in ultra-large pools makes it a challenge that warrants action.

Trustee Iverson asked if there are alternative options available to the District, such as allowing construction of pools up to 600 square feet without restriction, but requiring mechanical pool covers or other water-saving measures for pools larger than that.

Mr. Bennett responded that requiring mechanical covers or similar water-saving measures for larger pools is always a potential strategy, but such a policy would be at the discretion of the Board and municipalities. If the Board chose to pursue such a policy, the District would likely integrate it into the existing water efficiency standards.

Trustee Michelle Randall noted that the current discussion is focused on residential pools but wondered if the District knows the average size of a hotel pool.

Mr. Bennett responded that his information on hotel and apartment complex pools was anecdotal, and he had not yet conducted a complete analysis like the one for residential pools. Based on his preliminary review, Mr. Bennett said that many large hotels have approximately five square feet of swimming pool area per guest room.

Trustee Randall asked if the District had heard from the pool contractors. General Manager Zach Renstrom stated that the District has a meeting with the Home Builders Association scheduled for August 11<sup>th</sup>.

**Update on the Water Efficient Landscape Program and consideration of a resolution to modify program requirements**

Conservation Manager Doug Bennett gave an update on the Water Efficient Landscape Program and asked the Board for authorization to modify the program requirements.

Mr. Bennett reported that the District has received 4,100 applicants, finished 2,300 finished projects, and converted 2.8 million square feet of grass, which is equivalent to about 50 football fields of conversion. The estimated water savings is 120 million gallons/year (or about 350 acre-feet). The cost is about \$16,000 per acre-foot water which with the state match costs the district about \$7,500 per acre-foot.

Mr. Bennett told the Board that in 2023, 230,000 square feet were converted. In 2024, there was a 90% increase over 2023. In 2025, between January to mid-July, there has been a 31% increase over 2024. Between 2023 and 2025, the District's program outperformed the Southern Nevada Water Authority's residential conversions on a per capita basis. The program's participation primarily is driven by word-of-mouth.

Mr. Bennett highlighted a special funding opportunity with Santa Clara City. Santa Clara has \$82,000 in Excess Water Use Surcharge (EWUS) funds. The District is proposing to add a \$1.00 per square foot bonus payment up to \$500 for Santa Clara residents. The funds qualify for state matching and will double the available amount for Santa Clara residents to \$164,000. Pending Santa Clara City Council approval on August 13, implementation is planned after September 1, 2025.

Mr. Bennett presented a request for the Board to authorize a change to the program rules to make it more attractive for larger institutional properties. The current payment is limited to \$2.00 per square foot for the first 5,000 square feet, then \$1.00 per square foot thereafter. Larger commercial/institutional projects often do not participate due to the reduced incentive after 5,000 square feet. The District is proposing a \$2.00 per square foot payment for all qualifying square footage up to program cap of \$100,000 per applicant per year. Mr. Bennett said that he foresees the change will have a minimal budget impact since the current average payout is \$1.99 per square foot.

Mr. Bennett recommended that the board approve the resolution to modify the Water-Efficient Landscape Program to pay \$2.00 per square foot for all qualifying square footage beginning September 1, up to the existing program maximum of \$100,000 per applicant per year, and to authorize staff to develop any necessary policies or processes to implement this change.

Trustee Kress Staheli praised Santa Clara City for its innovative use of Excess Water Use Surcharge (EWUS) funds and asked Mr. Bennett what other communities are doing with their EWUS funds, which are returned to municipalities on an equitable basis.

Mr. Bennett said that Ivins City applied to use funds for Advanced Metering Infrastructure (AMI) or smart metering and the project is underway. St. George City is exploring upgrades to equipment at the Sand Hollow Aquatic Center with potential water savings of about 600,000 gallons per year. Mr. Bennett said that no EWUS funds have been disbursed to date, although several projects remain in discussion.

***Trustee Victor Iverson made a motion to approve the resolution modifying the water efficiency landscape program to pay applicants \$2.00 per square foot for all qualifying square footage effective September 1, 2025 up to the existing program maximum and authorize staff to develop appropriate policies and processes. The motion was seconded by Trustee Rick Rosenberg, and a roll call vote was taken as follows:***

<b><i>Ed Bowler</i></b>	<b><i>Yes</i></b>
<b><i>Rick Rosenberg</i></b>	<b><i>Yes</i></b>
<b><i>Clark Fawcett</i></b>	<b><i>Yes</i></b>
<b><i>Adam Bowler</i></b>	<b><i>Yes</i></b>
<b><i>Victor Iverson</i></b>	<b><i>Yes</i></b>
<b><i>Michele Randall</i></b>	<b><i>Yes</i></b>
<b><i>Kress Staheli</i></b>	<b><i>Yes</i></b>

**Consider approval of contract for Surveying and Mapping Service for the Regional Reuse Purification System**

Reuse Project Manager Trinity Stout briefed the Board on the background of the regional reuse system, stating that the project supports increased water supply through reuse, with significant growth expected by 2030 as key conveyance infrastructure comes online. The system captures treated water from the Virgin River, stores it in reservoirs, treats it further, and distributes it for municipal and reuse applications across Washington County. Expansion efforts are underway to extend reuse capabilities, including infrastructure running from the southwest corner of St. George to the northeast corner of Hurricane.

Mr. Stout said that the District previously hired Bowen Collins and Associates to perform a routing analysis and preliminary design report which studied potential pipeline alignments. After evaluating multiple options, the preferred alignment largely follows the Southern Parkway, with branches extending toward Warner Valley, Ash Creek facilities, and Hurricane. The project will be divided into approximately seven pipeline segments, three pump stations, and two reservoirs to be designed and constructed by 2030.

Mr. Stout explained that it is now time to conduct surveys and mapping (using lidar), geotechnical investigations, and right-of-way acquisition planning. The District issued a request for qualifications to perform these services and received 10 submissions. A selection committee composed of representatives from the reuse program partners (the District, City of St. George, and Ash Creek Special Service District) reviewed all submissions. Additionally, the District's owner adviser Stantec participated in the evaluation process.

The recommended firm is Civil Science, selected for their qualifications, local knowledge, and favorable fee proposal. The contract covers an initial 90-day work period for baseline studies, with ongoing support anticipated over the multi-year duration of the project. The contract amount is \$404,900, inclusive of survey flights, control point establishment, project support, and legal description assistance for right-of-way acquisition.

Mr. Stout also said that additional project management support and design engineering procurement are underway, with engineering teams expected to go onboard by year-end.



Mr. Stout recommended that the board approve the contract with Civil Science to proceed with survey, mapping, and baseline study services.

***Trustee Kress Staheli made a motion to approve the agreement for surveying and mapping service to Civil Science in the amount of \$404,900 as explained by Trinity Stout, the motion was seconded by Trustee Michele Randall and all voted aye.***

**Consider approval of Interlocal Agreement Between the City of St. George and the Washington County Water Conservancy District Regarding the Graveyard Wash Reservoir and the Sand Hollow Mitigation Area**

Reuse Program Manager Morgan Drake explained that Graveyard Wash Reservoir is a critical component of the regional reuse system and will be located on the west side of Washington County. The reservoir will be owned and operated by the City of St. George. This agreement outlines the parties' roles, responsibilities, and financial commitments, as well as a conservation land use agreement for the mitigation area.

The reservoir will be situated near Santa Clara. Based on an aquatics delineation report, construction will impact existing wetlands. Federal regulations require compensatory mitigation for these impacts, which is addressed in the agreement.

Ms. Drake explained that section 4 of the agreement outlines roles and responsibilities. The District will provide permitting support, assist with project design, acquire necessary private parcels, and offer project management support. The City of St. George will secure and maintain all permits, finance remaining project costs, design and construct the reservoir, operate and maintain it, share SCADA data with the District, and coordinate operations for the benefit of the regional reuse system.

Section 6 of the agreement covers the mitigation area. The mitigation site is in Sand Hollow Wash, near Snow Canyon High School and the Sand Hollow Aquatic Center. It is already owned and managed by the City of St. George. When a government entity owns and manages the mitigation site, the U.S. Army Corps of Engineers allows for a Conservation Land Use Agreement to document that the site will be funded, maintained, and meet the objectives outlined in the mitigation plan. The City is working with Alpha Engineering to restore and create wetlands in this area to compensate for those lost due to the reservoir's construction.

This draft interlocal agreement was submitted to the Army Corps of Engineers as part of the federal permitting process. It will serve as an exhibit to the final mitigation plan. This is the last required item for federal permitting. Upon Army Corps review and approval, the project will be cleared to proceed.

***Trustee Michele Randall made a motion to approve the interlocal agreement between City of St. George and Washington County Water Conservancy District regarding the Graveyard Wash Reservoir and the Sand Hollow Mitigation area, the motion was seconded by Trustee Adam Bowler and all voted aye.***

**Consider approval of Development & Water Services Agreement with Solara Communities**

Associate General Manager Brie Thompson gave the Board a brief recap on the proposed Solara Communities development. The project site is located between Leeds and Toquerville, in unincorporated county. If the Board approves the agreement, the District will be providing retail water service to the development. The property covers 200 acres, and the proposed agreement would apply to the first phase of the project, which includes 75 equivalent residential connections.

Aaron Tilton with Solara Communities explained they have been working on this project for almost two years now, and the project has already made significant progress.

Mr. Tilton said that the Water Conservancy District received a \$2 million state grant specifically for this project. A few months ago, the Board approved an action item to track this agreement that Brie Thompson mentioned earlier, and Solara truly appreciates all the hard work and thoughtful consideration that has gone into it.

Additionally, Mr. Tilton said that the Board adopted a policy change a few months ago to include the necessary provisions for a contract like this. Mr. Tilton believes Solara would be among the first developers to implement the ultra-water efficiency standards recently passed by the Board. These standards include effluent reuse and limiting swimming pools to community pools.

Mr. Tilton said that Solara has recently had discussions with Toquerville City regarding whether it is feasible for Toquerville to eventually take over the retail delivery of this water. Mr. Tilton said that Solara and Toquerville had similar discussions in the past, but at certain times Toquerville was not able to participate because their annexation plan was not in place. Even now, it would still take a few years to determine whether Toquerville could take this on, if it proves feasible. There is still a lot of work to be done in that regard.

Mr. Tilton said that passing this agreement today would allow Solara to move forward with the project. The development is planned to add roughly 200 units per year, beginning about 18 months from now. This will not be a sudden, high-density expansion; rather, it will be a measured pace of growth that Toquerville could potentially manage in the future once the infrastructure is completed.

Mr. Tilton said that Toquerville City has made it clear in their discussions that there is always the possibility that annexation, development, or their participation may never occur. There are details that still need to be addressed and agreed upon, and Solara remains open to those discussions. Mr. Tilton said that Solara has been in what could be described as a “no man’s land” of policy unable to move forward under existing rules. Solara attempted annexation first with Leeds, and then in 2020 there were discussions about accomplishing it with Toquerville, but those efforts did not move forward. So, despite Solara’s efforts to find other pathways, the project remains in unincorporated county boundaries. Solara needs to move forward so the project can be completed and built.

## **Discussion**

Trustee Kress Staheli asked Mr. Tilton to talk about access to the site, noting that it is located between the Toquerville and Leeds I-15 on- and off-ramps.

Mr. Tilton responded that they completed a traffic study for Anderson Junction, which included the Toquerville exit. That study was done in coordination with the truck stop project, and it accounted for the sequential frontage road on the northwest side of Mills Lane. In sequence, the Solara project came after the truck stop and the stacking of all those traffic studies demonstrated that Anderson Junction would provide sufficient access for the full build-out of Solara.

Since then, another study has been completed by the Dixie MPO for the potential of a second interchange off of I-15. Washington County, Toquerville, and Leeds all participated in reviewing alternatives. In June, they made a recommendation for the location of the new interchange. If it moves forward, it would be developer-funded, with Solara and other nearby developments contributing to the cost of constructing it.

Trustee Victor Iverson said that the county’s view is that Solara will need to secure a secondary access in order to move beyond 75 units. The county secured some planning dollars to ensure Leeds, Toquerville, the county, and the developers were all on the same page about where the best access point would be. Up until then, it was a bit ambiguous. Trustee Iverson said that he thinks what has been done now aligns with what Mr. Tilton has described regarding where that access should be. But as it stands, for the 75 units, under county zoning and fire requirements, a secondary access will need to be secured before the project can expand further.

Trustee Kress Staheli asked, “What is the total? I heard you mention 200 units per year assuming you can get past the 75-unit threshold, what is the total build-out you are projecting?” Mr. Tilton responded about 1,400 units.

Trustee Clark Fawcett said that he is not in favor of taking water to areas outside of city limits. He said that he appreciated the developer working with Toquerville and Leeds to try to make that happen within city boundaries and was interested in hearing Toquerville’s perspective. Trustee Fawcett said, “I know the water standards set by the Water District are good, but I am concerned about other factors. Specifically, in the county, standards are only enforced if the project is within an annexation area, where the county requires construction to meet city standards.

Where it is not annexed, whose standards are being applied? And how do we protect the cities from having to come back later and invest heavily in infrastructure upgrades if they eventually annex the area? We have faced that problem repeatedly, and I do not want to see it happen again.”

Trustee Iverson said that when it comes to county standards versus city standards, he would put the county’s community development and zoning codes up against any city right now. The county has made significant progress over the last 10 years, and it is no longer just about unincorporated areas. The county is willing to work with any city that asks, but the community standards are designed to align closely with those of the surrounding cities. That way, when areas are eventually annexed into a city, infrastructure like curb and gutter, roads, and other standards are already in place.

Mr. Tilton said that Toquerville is the applicant for one of the project’s roads, including Mills Lane. These roads are all inside the incorporated boundaries of Toquerville. Mr. Tilton said that Toquerville is the applicant for the BLM, and Solara will be building all those roads to Toquerville’s standards. The standards being applied by the county are similar to or even more stringent than Toquerville’s. This includes requirements like 66-foot-wide roads, curb and gutter, and all other relevant infrastructure standards.

Trustee Fawcett said that another issue for him is once a development is in place and the city wants to annex it, there is no real protection to ensure that annexation happens. Developments on city boundaries often use city services without paying for them.

Trustee Staheli said that Washington City has had some developers try to circumvent the process, but what he has appreciated about Solara is their straightforwardness. Trustee Staheli said he also appreciates that the county is not trying to interfere with the city’s business. Even though the district focuses on water, these issues overlap significantly. Trustee Staheli said that for him, the ability to develop land and provide much-needed housing in this area is a major factor. He said that it seems that Toquerville is a willing partner.

Trustee Fawcett said he appreciates that this development has gone to greater lengths than most in working with the cities to try to reach an agreement. It sounds like Toquerville is also cooperative on this. But Trustee Fawcett said that it always concerns him that, “even though we are talking about water here, there are so many other issues tied to it. Without water, development cannot happen. But once they get water, they can potentially do anything they want unless there are standards and controls in place.”

Mr. Tilton said that they have been willing and open throughout this process engaging with each city, the county, and the water conservancy district. Mr. Tilton said that during the development cycle, Solara expects it will take about four years before half of the land reaches the 50% threshold that would trigger annexation. Mr. Tilton said that gives Solara a solid four-year window to work with Toquerville to ensure annexation if they are willing and want to proceed.

Mr. Tilton said that Solara is planning to develop approximately 200 units per year, for a total of around 1,400 units, so there should be ample time to make this happen. More study is needed to determine if Toquerville is ready and interested, or if perhaps there could be a phased approach where they provide certain services and receive revenue from the project, even if full annexation does not happen immediately.

Trustee Fawcett said he appreciates Solara working through those approaches. If Toquerville is comfortable with that arrangement, they may decide at the 50% threshold that they are not ready or do not want to proceed and that is their decision to make. Trustee Fawcett said that he agrees with Trustee Iverson that the county has come a long way in addressing many of those problems. Trustee Fawcett said that when Hurricane was asked why it annexed areas, the answer was always to protect itself because otherwise the county would pick up developments, and then the city would have to deal with the consequences.

Trustee Michele Randall asked if this agreement passes and the development remains in no man’s land not within the city limits of Leeds or Toquerville and the District is managing retail billing, will a staff member actively monitor high water users or if there is a leak or something unusual, will they step in to ensure water is not being wasted.

Mr. Renstrom responded that all meters in the development will be required to be the new advanced meters, which allow detection of any type of leaks quickly. These meters trigger excess water surcharges at much lower thresholds and the District's water rates are higher than those of any of the surrounding cities, so monitoring is a priority.

Trustee Randall asked Toquerville City Manager Ben Billingsley how long the annexation would take.

Mr. Billingsley responded that Toquerville City has been engaged with this developer for quite some time. Toquerville submitted the BLM application for the right-of-way. All the city's concerns have already been raised at this point. Toquerville City has not yet received an application for annexation. The city would like the opportunity to contemplate annexation prior to any formal entitlements. This is the city's request. The reason behind this is that the development will create a significant impact on city resources outside of the development. Without associated revenue, Toquerville lacks the means to defray the costs of the infrastructure impact.

Mr. Billingsley said that Toquerville City understands that the development is moving forward and has momentum. The city would absolutely entertain annexation at this time. As Toquerville has contemplated how to facilitate this as part of the agreement before the Board, there are a number of ways this could potentially be approached through a required pre-annexation agreement as a condition for the overall agreement. Toquerville is open to whatever form that takes.

Mr. Billingsley said that he understands the District currently serves about 400 retail connections, and this development would expand that by approximately 1,400 units, which is a substantial increase. Anticipating future annexation, Toquerville would be willing to enter into a retail water service agreement. Since Toquerville already has manpower and resources in that area, the city could potentially provide full water services, including billing and maintenance. However, the city's primary concern at this stage is ensuring the pre-annexation component is addressed.

Trustee Staheli said that he appreciates Mr. Billingsley talking about annexation because it is a major consideration. Trustee Staheli said that if cities bordering unincorporated area wait to annex until units are already built out, the cities are not collecting the impact fees needed to provide the services cities ultimately deliver and, those impact fees are crucial not just for water services, but for many other city services. To provide those, cities must collect impact fees upfront and update their capital facilities plans accordingly.

Trustee Iverson said that based on conversations with some senior city leadership, he understood that Toquerville did not feel ready to take on this project. Mr. Iverson asked whether things have changed and if Toquerville is ready to act in an expedited manner.

Mr. Billingsley responded they have taken the pulse of the city council and that some of the issues predate both the current developer and the current city staff. There has been, understandably, some bad taste in the city's mouth from an incident several years ago related to a property. However, Mr. Billingsley believes the city is ready to move on from that and make progress on what development looks like going forward.

Trustee Iverson said that everyone has always agreed that it makes sense for the development to go into Toquerville. The impacts at the Anderson Junction exit are going to happen in any event. Trustee Iverson said that he appreciates Toquerville's current circumstances where it is just about ready to go live on the Fire Light subdivision, and the bypass road is ready. Toquerville is in a transformative time, but it is still a very small community with a small budget. Things are going to change quickly. Trustee Iverson asked what capacity Toquerville feels it has as a community to ramp up and manage these changes?

Mr. Billingsley responded that Toquerville has housing entitlements that exceed 10 times the current number of households. With the major development coming online, Toquerville has the planning capacity, essentially, to take the next steps and really be full speed ahead as the new development is going vertical now. Mr. Billingsley said that a lot of that entitlement work is already done, and Toquerville has the capacity to take the next new project.

Trustee Iverson asked if Toquerville City has reviewed the zoning from the process form. Mr. Billingsley responded that he understands the county has not granted any land use entitlements for this development.

Mr. Tilton responded that the concept plans have all been approved, and they are currently moving through the process. They have completed several steps with the county and have submitted applications. They are very close to finalizing a development agreement.

Trustee Randall asked if there is a reason Solar has not filed for annexation. Mr. Tilton responded that about nine to twelve months ago, Solar was told that the annexation plan was not ready and they were not able to annex into Toquerville. Toquerville City completed their annexation plan a few months ago, and Solar had already proceeded down this path based on the county's decision two years ago. Solar has maintained a collaborative approach with everyone involved, including the different cities. Solar will continue to work openly going forward. Mr. Tilton said that "if we were trying to build 1,400 units in two years, that would be a problem, but we are actually planning for about 200 units per year over the next eight and a half years. So, there is definitely time." Mr. Tilton said that when Solar completes the entitlements with the county, they should mirror what Toquerville requires, especially since Toquerville is already managing the roads within its city boundaries.

Mr. Tilton said that Solar is also included in Leeds annexation plan, so this is somewhat of a process. Mr. Tilton said that from previous discussions and just recently there is no guarantee annexation will actually occur. He said that is why Solar is pursuing multiple parallel paths: continuing to work with Toquerville, finishing what was started with the county, and ultimately expecting a convergence of these efforts. Mr. Tilton said that they do believe the project will have to be within a municipality, either Leeds or Toquerville. Toquerville seems the more likely path, but Solar is currently in both municipalities' annexation plans.

Trustee Randall commented that it would be easier to annex into Toquerville rather than Leeds. Mr. Tilton responded that may be the case, but Toquerville has also said that annexation may not be approved.

Trustee Staheli said that he wondered what motivation Solar would have to annex if it gets water from the district. Trustee Staheli said that he appreciates the idea of a pre-annexation agreement between Toquerville and Solar as suggested by Toquerville City manager Ben Billingsley. Trustee Staheli said that if Solar has water service and county entitlements, the developer effectively has everything it wants. But, in the long term, the broader community and the residents will be better served within city boundaries. Trustee Staheli said that he questioned how to support Solar in securing both the entitlements and the path to annexation. He feels that if the Board approves the water tonight, it might remove some motivation. Trustee Staheli said that there needs to be ongoing conversation between Solar and Toquerville City.

Trustee Iverson asked if something has changed in Toquerville. Toquerville City Councilmember Joey Campbell responded that Toquerville's annexation policy was just redone and revamped so the city could do this properly. These conversations originally took place back in 2020 and 2021 with a different developer. That developer eventually stepped away, and the project stalled. It was not that the city was unwilling to annex at that time - the project just lost momentum. However, Mr. Campbell believes the city is now in a much better position with improved management and many other factors to move forward.

Trustee Staheli asked if a majority of the Toquerville City council would approve an application to annex from Solar if they applied now. Mr. Campbell responded yes, and he thinks everyone would vote to approve the application.

Trustee Iverson asked if annexation would immediately reset everything for the development. In other words, the city would need to review all land use approvals and go through its own processes as well.

Mr. Tilton responded that one of the issues Solar would face is that there are certain things the development is doing with the county that may not exist with Toquerville, including municipal bonds and other financing tools. Mr. Tilton said that there are policies and other requirements tied to that. This is a significant issue that would need to be addressed. Annexation is one matter, but when the discussion involves the impacts on municipal bonding and all the elements needed to build the infrastructure, it becomes a much larger and more complex issue.

Trustee Iverson said that since Toquerville has their PID on Fire Light subdivisions, the city should have the zones up to speed. Mr. Billingsley responded the city has issued quite a few PIDs within Toquerville in the last year. Toquerville also recently adopted a policy regarding the creation of future PIDs. Mr. Billingsley said that a PID can

be funded through two primary mechanisms: either a limited tax or a special assessment. The city has essentially taken the position that it discourages the future use of the limited tax component of a Public Infrastructure District, but the special assessment component would still be viable in this scope. Mr. Billingsley said that he understands that the preliminary documents submitted to the county contemplate both a limited tax and a special assessment.

Mr. Tilton said, "Yeah, that is something the county has that the city does not, and it is critical because, being out there in essentially no man's land, we are bringing a lot of infrastructure to that location that could ultimately serve multiple developments if possible. That means the development of the area could move forward more effectively." Mr. Tilton said the county's PID policies work better in this case because of the remote nature of the site, they give multiple funding options, whereas the city's approach only provides one.

Trustee Randall said that it sounds like Mr. Tilton is saying is that Solara does not want to be annexed into Toquerville because it is easier to work with the county since the county has different tools. Trustee Randall said she disagrees with that because the city has the same tools that the county has.

Mr. Tilton responded Solara has already gone quite far with the county to get everything in place, and Solara is not opposed to being annexed into Toquerville at all. But Solara would like to finish the PID policy work and the other steps they are doing now with the county, and then look at a much more organized, cohesive way to move annexation forward over the next two or three years. From Solara's perspective, annexing right now would mean starting over, which would be significantly difficult.

Mr. Tilton said it could work if the Board was to adopt language in the agreement acknowledging that annexation into a municipality is a future consideration. Mr. Tilton said that he was not sure whether the agreement would name Toquerville, Leeds, or any other specific city since the agreement is between Solara and the conservancy district. Mr. Tilton said that approving the agreement with that type of amendment would make sense.

Michelle Peot addressed the board and said she was speaking on behalf of the Leeds council. Ms. Peot said it is more challenging for Leeds to annex this property because Leeds would also have to annex other property to make it contiguous. Ms. Peot said that Toquerville does have contiguous land with the project area, so they would not face that additional step. For Leeds, it is simply a bigger hurdle to go through that process.

Trustee Iverson commented that it would be harder for Leeds because they are not in the regional water agreement. Mr. Iverson also said that Toquerville does make sense. But Trustee Iverson said that he was surprised to learn that Toquerville feels that it is ready to proceed with the annexation. Trustee Iverson said that if he had known, he would have been pushing hard for the project to have always been in Toquerville.

General Council Jodi Richins asked Associate General Manager Brie Thomason if the district would need to get further development agreements beyond the 75 units? Ms. Thompson responded that this agreement is for the first of three phases.

Ms. Richins asked Mr. Tilton if they would have their PID financing in place. Mr. Tilton responded that Solara is not entirely sure and is still working with the county on that. The application has been in for a while, and it looks like it will be approved shortly. Mr. Tilton said that with PID financing, you cannot go to market until you have your entitlements. That means it would require a development agreement with the county and the project development to be completed, which will be submitted after the PID approval.

Ms. Richins asked if the PID financing is only for 75 units. Mr. Tilton responded, "no it will be done for each phase as it moves forward." Mr. Tilton said that essentially, there will be four different districts within the project, allowing the financing to be done sequentially. Funds are not pulled down before they are needed for use.

Ms. Richins asked if some PID financing tools are not available within a municipality and Solara were annexed after 75 units, would Solara lose access to those tools, or would they already be in place and still available. Mr. Tilton responded that because a PID is an independent political subdivision of the state, once it is formed, it remains in place whether the area is annexed or not.

Trustee Adam Bowler said that when annexing, it is not just about the total property value, rather the number of property owners is also considered. So even if there are 75 units, that might still hamstring the ability to annex in.

Mr. Tilton responded that because for the first 75 units, the developer still owns the rest of the acreage. So, in terms of land mass, the developer represents far more than 50% of the land ownership. That means Solara could have several years where a majority ownership percentage remains in the developer's hands before annexation could realistically occur.

Trustee Staheli pointed out that the proposal has 74 lots, with 14 single family homes and 60 townhomes. Mr. Tilton said Solara will be coming back for more discussion and dialogue as it grows and moves the project forward. Moving ahead, Solara is also working with Toquerville to determine if annexation is feasible.

Trustee Staheli commented that this is difficult because the Board genuinely wants to help move this project forward. On the other hand, the Board recognizes what the City of Toquerville is facing. This development agreement for the 74 lots represents a way for this group who has invested years of work and resources collaborating with the county to step forward without putting this Board under any obligation to provide water beyond the 74th lot. This also will start a clock for Solara and Toquerville to work together on how this development transitions fairly to Toquerville.

Chairman Ed Bowler said that he understands Mr. Tilton to have said that Solara is in the process of figuring out how to annex the rest of the property into Toquerville. Solara has spent a lot of time getting to this point and the agreement with the District is only for the first 75 lots. So, if Solara comes to the Board with another development later, it would be at the Board's discretion whether to approve it or not. Mr. Bowler said that he assumes that Toquerville and Solara get along well enough to figure this out moving forward. Because they have worked together on the roads and the BLM, Mr. Bowler does not think it should be a problem. Toquerville will have leverage in the next phase because at that point, the District can decide whether to move forward or not.

Trustee Adam Bowler said that he has been involved in this for about two years now, and throughout that time, this question has consistently come up. Before today, Trustee Bowler's understanding was that Toquerville was not ready to take this on, so today's information is new to him. Trustee Bowler said that he does not want to suggest that those two years were wasted, but he strongly believes the development needs to be within city limits.

Mr. Tilton commented that Solara's interests are aligned with Toquerville's, not just the Board's. Solara recognizes that two years ago, it was always going to be better to be in the city and go through that process, but at that time, the information and circumstances meant they were not ready. Solara is willing to go back and work through it again, but Solara would like the opportunity to keep moving forward so they do not have to start over. Mr. Tilton said that the developers have literally invested tens of millions of dollars, and starting over would be very difficult and costly. Having this kind of bifurcated and converging approach works well because it aligns Solara with Toquerville, and they can work things out through that process. Nothing will be built for the first 18 months anyway, as Solara still needs to complete final engineering and other steps. Mr. Tilton said that he believes the planning process can work out well.

Trustee Adam Bowler said that he will only support moving forward with the agreement if Solara is genuinely working with Toquerville to achieve annexation. Trustee Bowler said that if he were to vote yes, it would likely be a conditional yes with the understanding that later Solara either gets annexed or come back with a letter from Toquerville confirming they have no objection. Trustee Bowler said, "that is essentially where we were two years ago, and now we are on the verge of progress, and it turns out some of the previous information might not have been fully accurate."

Trustee Iverson said he wished he had known sooner that Toquerville is ready to move forward. Trustee Iverson said that as a member of this Board and the county commission, he wants to be respectful and deferential to the city of Toquerville. Trustee Iverson said that he also believes that Toquerville is really the only viable option for annexation here, as Leeds is not really on the table and has not ever been.

Toquerville City Councilmember Campbell said that a big decision weighing on the city right now is related to service districts where Grapevine Wash was approved, and eventually, all these services going through Fire Light

and into the Confluence Park treatment plant will flow to Toquerville for reuse. This has been a major shift. The city is realizing that this infrastructure and these services are coming no matter what, so it makes sense to annex sooner rather than later. The sooner the annexation happens, the better it is for Toquerville, as it simplifies everything.

Trustee Staheli asked Trustee Rosenberg for his feedback on land use. Trustee Rosenberg commented that this has been a good discussion, and everyone has learned more about the process over the last couple of years. There are lessons to be learned. When the District was created and granted taxing authority, it was intended to provide water for all properties within the county. Trustee Rosenberg said that from his understanding, the District cannot simply turn down an application from a property in the county that has secured entitlements through the county's land use authority. So, if the entitlements are in place, Trustee Rosenberg does not think it is an option to deny service. Trustee Rosenberg said that the District would prefer the development annex into Toquerville, but that process has been ongoing for two years and is not complete yet. It still requires public hearings and formal annexation approvals.

Trustee Rosenberg said the county has done well encouraging properties to annex into cities where possible, but if that is not feasible, the county's own development and land use policies must enable the development to move forward. Given the taxing authority and responsibilities of the District, Trustee Rosenberg believes the District is obligated to work with these developments once entitlements are granted.

Trustee Staheli asked whether Toquerville City representatives approved the District entering the agreement recognizing that this would give Solara 74 lots. Solara will continue their process, but the clock is ticking for Toquerville as well. The Board has expressed some concerns, and it is not a slam dunk. Trustee Staheli thinks there is still some leverage for annexation, but the time is now. If Toquerville wants Solara in the city, this is the moment to move that forward. Trustee Staheli asked, "Are you going to have heartburn if this Board approves this and can you support it?"

Mr. Billingsley asked whether the District currently has a policy requiring annexation if the property is within the annexation area of a municipality? Mr. Renstrom responded that there is no defined policy requiring annexation, but whenever the District does provide service, the District typically has a development agreement brought before the board for a vote.

Mr. Billingsley said from his perspective, Toquerville would support agreeing to the first phase of the development agreement, with the second phase being conditional upon the outcome of an annexation application. Mr. Billingsley said that given that the project is roughly a year and a half from breaking ground, he would anticipate that if the annexation process was moving forward before the applicant came back for the next phase, Toquerville would have the outcome of that annexation by then.

Trustee Bowler commented that annexation is not quick, but it is quicker than 18 months. Trustee Bowler said that Solara needs to work with the city and that also means Solara needs to apply for the annexation. Toquerville City is not going to initiate it on their own. Solara has to submit the application. There is still some give and take on this, and even if the Board approves the first phase, Trustee Bowler's expectation is that by the time Solara returns for the next phase, Solara will have pursued the annexation process.

Trustee Staheli said that there is no guarantee that the Board would approve additional phases for wholesale or retail water supply. Trustee Staheli said that is really Solara's motivation to work with Toquerville — because without that, Solara would likely not be back here for a second phase.

***Trustee Kress Staheli made a motion to approve the Development and Water Service Agreement with Solara Communities, LLC. This agreement is restricted to Phase One only, which will include approximately 10 acres within the property. The project will have 74 lots, consisting of 14 single-family homes and 60 townhomes. The motion was seconded by Trustee Rick Rosenberg. All voted aye, except Trustee Clark Fawcett, who voted nay.***

**Consider approval of bid for Kolob Creek Dam Spillway Repair**



Project Manager George Elliott explained that Kolob Creek Reservoir is located approximately 20 miles north of the Town of Virgin. It is an important reservoir in the District's system and plays a critical role in supplying water. Last spring, District staff discovered damage to the spillway. Water from the reservoir had begun to flow beneath the spillway structure rather than over it as designed. The concrete chute meant to direct overflow water safely downstream was compromised.

This undermining effect was due in part to freeze-thaw cycles and caused cracking, heaving, and damage to structural components, including a cutoff wall near the downstream bridge. Fortunately, the water was not penetrating through the dam itself but was confined to the spillway zone. After the issue was identified, the District took emergency action. The District injected concrete into the voids beneath and around the spillway to stabilize the structure temporarily. While these measures helped, they are not a permanent fix.

Mr. Elliott explained that this is a high-priority repair project. The work must be completed before the spring runoff, ideally before winter snowfall limits access. That means the next few months are critical.

The District put this project out for bid and received three qualified proposals. The lowest responsive bidder was Interstate Rock, with a bid of \$1,005,005.

Interstate Rock is well-qualified, with extensive regional experience, familiarity with the site, and they attended the mandatory pre-bid site meeting.

***Trustee Adam Bowler made a motion to approve the bid for Kolob Creek Dam Spillway Repair to Interstate Rock in the amount of \$1,055,005, the motion was seconded by Trustee Clark Fawcett and all voted aye.***

#### **Manager's report**

General Manager Zach Renstrom said that the District recently cleaned a section of the regional pipeline that has not been cleaned since it was installed in the 1980s. Mr. Renstrom said that a device called a pig was inserted into the pipe with the goal of flushing out a lot of silt and debris. Mr. Renstrom shared a video of the process. At one point during the process, the video showed the pig pushing a combination of air and debris out of the line, which caused a dramatic geyser effect.

Mr. Renstrom also told the Board that when the District began considering a name for the new reservoir by Anderson Junction, the District received a formal request from the Shivwits Band of Paiutes to name the reservoir Chief Toquer, in honor of a historical figure associated with their community. The Board reviewed the request and agreed to move forward with that name. However, the District has since been contacted by representatives of the Paiute Indian Tribe of Utah which serves as the governing tribal authority over the Shivwits Band. The representatives said they are upset about the use of the name 'Chief Toquer' and are planning to hold a meeting to discuss the matter. They indicated it is likely they will submit a formal letter requesting that the name be changed.

Mr. Renstrom said he made it clear that from the District's perspective, the primary focus is on water infrastructure. The District does not intend to cause offense and is willing to change the name if that is the consensus of the Tribe. The Tribal representatives said they appreciated the District's openness, and they will be discussing the matter further in their internal meeting.

#### **Consider approval of July 7, 2025 & July 28, 2025 board meeting minutes**

***Trustee Adam Bowler made a motion to approve the July 7, 2025 and July 28, 2025 board meeting minutes, the motion was seconded by Trustee Rick Rosenberg and all voted aye.***

The meeting was adjourned upon motion.

*Mindy Moos*

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Secretary

**WASHINGTON COUNTY WATER CONSERVANCY DISTRICT  
A RESOLUTION AMENDING PROGRAM CONDITIONS AND AUTHORIZING THE  
DEVELOPMENT AND IMPLEMENTATION OF SPECIAL PROVISIONS FOR  
THE WATER EFFICIENT LANDSCAPE REBATE PROGRAM**

WHEREAS, the Washington County Water Conservancy District is charged with conserving, developing, managing and stabilizing water supplies within the county in an ongoing effort to provide a safe, sustainable water supply for current and future generations;

WHEREAS, water conservation is a critical and cost-effective mechanism for ensuring a sustainable water supply;

WHEREAS, the Board adopted resolutions on December 22, 2022 and August 7, 2023 to create and manage the Water Efficient Landscape Program ("Program") to convert lawn grass to water efficient landscaping;

WHEREAS, Program staff advised the Board that participation from properties with large areas of lawn grass are inadequately incentivized to undertake conversions of more than 5,000 square feet;

WHEREAS, the Board adopted a resolution on October 7<sup>th</sup>, 2024 authorizing a program to restore equity among agencies with regard to the collection of excess use surcharges;

WHEREAS, such funds like referenced above may become available from other governmental and non-governmental organizations to augment the Water Efficient Landscape Program and such funds may require additional Program provisions;

NOW THEREFORE, the Board of Trustees of the Washington County Water Conservancy District hereby resolves that:

1) The following section "**Rebate Amounts**" of the program conditions shall be amended to omit the stricken language:

- Property owners will be paid \$2.00 per square foot. ~~for the first 5,000 square feet and \$1.00 per square foot thereafter.~~

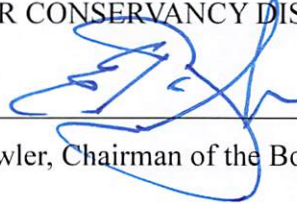
- ~~Homeowner associations converting common area may opt to be paid \$2.00 per square foot for the first 1,000 square feet per developed lot within the association and \$1.00 per square foot thereafter.~~
- The maximum payment for any property is \$100,000 per calendar year.
- Measurements taken prior to the conversion project are estimates only. The total payment will be based upon measurements taken at project completion. A reduced water bill is not guaranteed.

2) District staff are authorized to develop and implement specialized Program provisions to capitalize upon supplemental funding, to be approved by the General Manager before implementation.

DATED this 4th day of August, 2025.

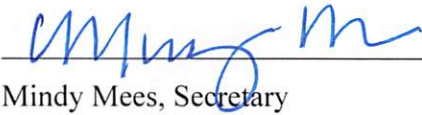
(Signature Page to Follow)

WASHINGTON COUNTY  
WATER CONSERVANCY DISTRICT:



Ed Bowler, Chairman of the Board

ATTEST:



Mindy Mees, Secretary

VOTING:

Ed Bowler	Yea <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Adam Bowler	Yea <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Rick Rosenberg	Yea <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Victor Iverson	Yea <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Michele Randall	Yea <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Kress Staheli	Yea <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Clark Fawcett	Yea <input checked="" type="checkbox"/>	No <input type="checkbox"/>



## Procurement Memo

**To** Zachary Renstrom, General Manager  
**From** Trinity Stout, Reuse Project Manager  
**Date** August 4, 2025  
**Subject** Procurement of Survey and Mapping Services

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**Type of Procurement:** Design Professional Procurement for Survey and Mapping Service

**Item Description:** Survey and Mapping Services for the Regional Reuse Purification System

**Reason for Procurement:** The Reuse Program of the Washington County Water Conservancy District (district) needs to procure this service in order to provide consistent imagery and survey along the reuse pipeline corridor for consistency in design and construction of the Regional Reuse Purification System.

**Review of Design Professionals:** The following design professionals submitted statements in response to the district's Request for Statements of Qualifications. Civil Science was the highest scoring design professional with which a satisfactory contract was negotiated at a price fair and reasonable to the district.

1. Civil Science: This design professional was determined to best meet the needs of the district because of their qualifications, knowledge, local experience and presence, and detailed management plan. A satisfactory contract was negotiated with this design professional at a price fair and reasonable to the district.
2. Meridian Engineering: This design professional did not score as high as the successful design professional.
3. Sunrise Engineering: This design professional did not score as high as the successful design professional.
4. Horrocks: This design professional did not score as high as the successful design professional.
5. JUB Engineers: This design professional did not score as high as the successful design professional.

6. Methods Consulting: This design professional did not score as high as the successful design professional.
7. Ensign Engineering: This design professional did not score as high as the successful design professional.
8. Alpha Engineering: This design professional did not score as high as the successful design professional.
9. Rosenberg Associates: This design professional did not score as high as the successful design professional.
10. Aerotech Mapping: This design professional did not score as high as the successful design professional.

**Purchase Amount:** \$404,900.00

**Contract Type(s):** Fixed Price

**Accounting Code:** 65-7035-300

Approved:



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Zachary Renstrom, General Manager



**SURVEYOR AGREEMENT**  
***(Regional Reuse – Survey and Mapping)***

This Agreement is made and entered into effective on the 4 day of August, 2025, by and between the Washington County Water Conservancy District, a political subdivision of the State of Utah (the “District”), and Civil Science Infrastructure, a Utah corporation (the “Surveyor”).

**RECITALS**

WHEREAS, the District desires to engage a surveyor to provide surveying and mapping services for the Regional Reuse Purification System; and

WHEREAS, the Surveyor has submitted a statement of qualifications and has been selected to perform survey and mapping services for the District as more fully set forth in its Proposed Scope of Work, a copy of which is attached as Exhibit A, which is incorporated into this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, the parties agree as follows:

**SPECIFIC TERMS**

**1. Description of Services.**

The Surveyor will perform the services described in the Proposed Scope of Work (Exhibit A) in accordance with the applicable professional standards of care, in a reasonably timely, efficient, and professional manner, in accordance with this Agreement and in consultation with the District and others whom the District may identify from time to time.

**2. Task Orders.**

The District may, at its sole discretion, from time to time during the term of this Agreement issue written Task Orders for services of the Surveyor. Verbal statements describing work shall not be binding. If the Surveyor accepts the Task Order it will be signed by the Surveyor and returned to the District. The Surveyor shall receive payment based on the hourly rates and expenses as described in Exhibit A or as otherwise expressly stated in the Task Order. If the Surveyor has any question or concern regarding the contents of the Task Order, such as the Task, the expected completion date, the expenditure limit, the question, or concern shall be addressed on a timely basis with the District. Ordinarily, significant clarification should be in writing. No work on Task Orders by the Surveyor shall commence unless and until a Task Order is provided by the District to the Surveyor and returned to the District signed by the Surveyor.

### **3. Responsible Staff Members.**

Responsible principals or staff members of Surveyor, and any sub-contractors identified by name in the Proposed Scope of Work (Exhibit A) shall be committed to the providing the services provided under this Agreement. Upon submitting a request for payment for services, the Surveyor shall provide verification of the names of staff members, their respective rates, and the number of hours worked by each staff member. Responsible principals or staff members, or sub-contractors, who retire, quit, or die shall be replaced by individuals who are equally qualified, each of whom shall be subject to the District's approval under this Agreement. Failure to comply with the requirements of this provision shall be grounds for terminating this Agreement.

### **4. Payment.**

The District shall pay the Surveyor in accordance with the Fee Proposal, included in Exhibit A, pursuant to monthly invoices submitted by the Surveyor. The Surveyor will only invoice actual accrued costs. The District will remit payment to the Surveyor within 30 days of invoice receipt, subject to the following:

#### **a. Limits of payment.**

Under no circumstances shall the District make a payment to the Surveyor that exceeds the amounts specified in the Fee Proposal, for any specified line item or cumulatively, without an approved addendum to the Proposed Scope of Work and Fee Proposal.

#### **b. Withholding payment.**

The District may, at its option, withhold ten percent (10%) of any amount due if, due to the fault of the Surveyor, the work is not satisfactory to the District or if the work falls behind schedule, which amount(s) withheld will be disbursed to the Surveyor within 30 days of the Surveyor rectifying the cause for withholding to the District's satisfaction. The District may also, at its option, withhold final payment under this Agreement until receipt of all final reports and deliverables. All retained payments shall become due and payable upon satisfactory completion of the work under this Agreement and any subcontracts hereto.

#### **c. Penalties.**

When work is not completed by the deadlines set forth below, the District may reduce the payment due under this Agreement by \$100 for every day between the completion date and the date of actual completion. In addition, if work is not completed within 30 days of the specified completion date, the associated payment shall be reduced by 25%. If the deadlines set forth



below must be changed for good cause shown, the Surveyor shall submit an addendum to be approved in advance of the applicable specified deadline set forth below.

**d. Proposed Changes to Cost Estimate**

During the term of this Agreement the Surveyor may submit for the District's review any suggested changes to the Fee Proposal, including, but not limited to, changes in the personnel, rates, and expenses. Absent unusual circumstances, changes in rates or expenses will not be considered by the District unless submitted at least 180 days prior to the beginning of a new District fiscal year. The District's fiscal year is from January 1 through December 31. No changes shall be effective unless approved by the District in writing. Absent express written approval by the District, changes shall be effective only as to work or service calls requested or issued after the date the changes are accepted in writing by the District. If the parties cannot reach an agreement on proposed changes either party may terminate this Agreement. Except as described in Section 10 below, such termination shall not affect the rights and obligations of the parties under accepted, but incomplete work.

**5. Commencement and Completion.**

The work covered by this Agreement shall be completed in accordance with the schedules set forth in Proposed Scope of Work (Exhibit A), provided, however, that an extension may be requested for good cause shown.

**GENERAL TERMS**

1. Form of Deliverables. All deliverables shall be produced in both hard copy and electronic formats, including portable document format (.pdf) copies and, where applicable to the nature of the deliverable, AutoCad (.dwg) and ArcGIS shapefiles or geodatabase in the projected coordinate system of NAD 1983 State Plane Utah South FIPS 4303 Feet.

2. Ownership of Information. Title to all reports, information, data, computer data elements, and software prepared by the Surveyor in performance of this Agreement shall vest in the District unless otherwise provided for in this Agreement. Subject to applicable State and Federal laws, regulations, and contract requirements, the District shall have full and complete rights to reproduce, duplicate, disclose, and otherwise use all such information. Subject to compliance with Section 3 (Security and Confidentiality of Records), the Surveyor may publish and/or use the reports, information, data, computer data elements and software prepared in the performance of the agreement for its non-commercial, educational and research purposes only, provided, however, that no such information shall be disclosed without the prior consent of the District.

3. Security and Confidentiality of Records. District facilities are critical public infrastructure. Certain information the District must provide to the Surveyor for the Surveyor to perform its work is very security sensitive. The Surveyor will strictly comply with District written security protocols provided by the District to the Surveyor and these written security protocols may be changed from time to time by the District. Such protocols may include, but are not limited to, restrictions of numbers of copies to be kept in any form by the Surveyor, the form of the information storage, the security precautions to be followed, restrictions as to who may have access to information, the confidentiality agreement to be signed by individuals before they may be given access, the methods and means by which copies of information will be destroyed upon completion or termination, the methods and means by which

destruction will be verified to the District, the steps that will be taken by the Surveyor in the event of any breach or suspected breach of security or security protocols. District security protocols and any changes which are provided to Surveyor will be immediately complied with by the Surveyor. The Surveyor will notify the District immediately if the Surveyor has concerns or questions regarding such protocols or changes to protocols. In the event the District has not provided written security protocols, the Surveyor shall establish, maintain, and strictly comply with procedures and controls that are acceptable to the District for the purpose of assuring that no information contained in the Surveyor's records or obtained from the District or others in the course of carrying out its functions under this Agreement shall be used or disclosed by it, its agents, officers, or employees, except as is essential to the performance of duties under this Agreement. Persons requesting such information from the Surveyor shall be referred to the District for access to records in compliance with the Utah Government Records and Management Act. If the performance of duties under this Agreement requires the Surveyor to disclose information other than as is set forth in this section, prior to doing so, the Surveyor shall apply to the District for written permission to make such disclosure.

4. Independent Contractor. Both parties hereto agree that the Surveyor shall be deemed an independent contractor in the performance of this Agreement, and shall obtain and maintain all licenses, permits, and authority necessary to do business and render services under this Agreement and shall comply with all laws regarding unemployment insurance, disability insurance, and workmen's compensation. As such, the Surveyor shall have no authorization, express or implied, to bind the District to any agreement, settlement, liability, or understanding whatsoever, and agrees not to perform any acts as agent for the District, except as expressly set forth herein. Compensation stated herein shall be the total amount payable to the Surveyor by the District. The Surveyor shall be responsible for the payment of all income tax and social security amounts due as a result of payments received for the District for these contract services. Persons employed by the District and acting under the direction of the District shall not be deemed to be employees or agents of the Surveyor.

5. Subcontracts. Unless otherwise provided by the terms of this Agreement, the Surveyor shall not subcontract with any other party for the furnishing of any of the work or services contracted for herein without the prior written approval of the District. When authority to subcontract is granted, the Surveyor agrees to use written subcontracts drawn in conformity with Federal and State laws which are appropriate to the activity covered by the subcontract, which shall include all of the general provisions set forth herein and which shall apply with equal force to the subcontract as if the subcontractor were the Surveyor referred to herein. The Surveyor is responsible for contract performance whether or not subcontractors are used. The Surveyor shall submit the name of each subcontractor which the Surveyor intends to hire and, if requested, a copy of each subcontract to the District for approval at least twenty (20) days prior to its effective date.

6. Record Keeping, Audits, and Inspections. The Surveyor and any subcontractors shall maintain financial and operation records in sufficient detail to document all transactions relating to the disbursement of contract funds. The Surveyor shall make available for audit and inspection all such records relating to Agreement services, requirements, and expenditures until all audits initiated by State and Federal auditors are completed, or for a period of five years from the date of termination of this Contract, whichever is longer, and for such period as is required by any other paragraph of this Contract. Records which relate to disputes, litigation, or the settlement of claims arising out of the performance of this Contract, or to cost and expenses of this Agreement as to which exception has been taken by the District, shall be retained by the Surveyor until disposition has been made of such disputes, litigation, claims, or exceptions.

7. Completeness and Accuracy. The Surveyor shall be solely responsible for the completeness and accuracy of all of its final work product, including, but not limited to, plans, supporting data, and technical specifications prepared pursuant to this Agreement. The Surveyor shall be responsible to the District for any error or omission by any of its employees, subcontractors, or suppliers. The Surveyor shall correct all errors or omissions at its own expense. This provision is not intended to prevent the Surveyor from seeking reimbursement or indemnity from any employee, subcontractor, or supplier. Any additional cost or damages incurred by the District as a result of such errors or omissions shall be the responsibility of the Surveyor.

8. Indemnification and Insurance. In no event will any fault of the Surveyor or its employees, subcontractors, or suppliers be reapportioned to the District or its officers, trustees, or employees. The Surveyor will indemnify and hold the District and its officers, trustees, or employees harmless from any such reapportionment of fault.

Consistent with Utah Code Annotated Section 63G-6a-1203, the Surveyor will indemnify the District and its respective officers, trustees, or employees from any claim of third parties to the extent caused by the Surveyor's

breach of this Agreement or by the negligence or other fault of the Surveyor, or its employees, subcontractors, or suppliers. Any invalidity of any portion of this indemnification duty will not defeat any remaining portion of this described indemnification duty. This indemnity shall be interpreted to provide the District and its officers, trustees, and employees with indemnity to the greatest extent allowed by law. This paragraph shall survive any termination of this Agreement. The rights provided in this paragraph shall be in addition to any rights to which the District may otherwise be entitled.

Surveyor, at its own cost and expense, shall secure and maintain policies of insurance in accordance with Exhibit B. The indemnification obligation provided herein shall not be limited in any way by the obligation to maintain insurance.

9. Payment.

- a. Release of Payment. The District will not authorize payment to the Surveyor that exceeds an amount specified in this Agreement without an approved amendment to the Agreement. The District may, at its option, withhold final payment under the Agreement until receipt of all final reports and deliverables.
- b. Availability of Funds. Implementation of this Agreement shall be subject to the availability of appropriated funds. The District may cancel or suspend this Agreement without penalty if adequate funds are not appropriated or received.
- c. Waiver of Claims. Prior to acceptance of final payment, the Surveyor shall submit in writing to the District any known claim that the Surveyor or any of the Surveyor's employees, subconsultants, or subcontractors may have against the District or any of its employees. The acceptance of final payment by the Surveyor will constitute a waiver of any such claim other than those claims previously made in writing and submitted to the District. The Surveyor shall hold the District harmless from any claims, including costs and attorneys' fees, by any of Surveyor's employees, subconsultants, or subcontractors which are not made in writing prior to acceptance of final payment. The tendering of final payment by the District will not constitute a waiver of any claim the District might have against the Surveyor, whether known or unknown at the time such payment is made.

10. Term. The term of this Agreement shall be one (1) year, commencing on the date the Agreement is made, as set forth above. The term may automatically be extended for up to four successive one (1) year terms, unless notice of non-extension is given by either party at least thirty (30) days prior to end of a term.

11. Time is of the Essence. Time is of the essence with regard to this Agreement as to each covenant, term, condition, representation, warranty and provision hereof.

12. Termination. The District reserves the right, at its discretion, to terminate this Agreement, or to abandon any portion of the services provided under this Agreement at any time. In the event District terminates this Agreement or abandons any portion of the work hereunder, the District shall notify the Surveyor in writing. Immediately upon receipt of such notice, the Surveyor shall discontinue services as directed by the District and deliver to the District all drawings, technical specifications, hard copy and electronically stored information, computer programs and data, estimates, and any other documents or items of information, in whatever form or media, developed or gathered by the Surveyor in the performance of this Agreement, whether entirely or partially completed, together with all materials supplied by the District. The Surveyor shall document its services through the termination date and submit such documentation to the District for its evaluation. The Surveyor shall receive compensation for services performed up through the date of termination or abandonment.

13. Compliance with Laws.

- a. Laws and Regulations. Any and all actions performed pursuant to this Agreement will comply fully with all applicable Federal, State and local laws and regulations.
- b. Boycott Restrictions. Pursuant to Utah Code Annotated Section 63G-27-201, the Surveyor certifies that it is not currently engaged in a boycott of the State of Israel or an economic boycott. The Surveyor agrees not to engage in a boycott of the State of Israel for the duration of this Agreement. The Surveyor agrees to notify the District in writing if it begins engaging in an economic boycott.

- c. Equal Opportunity Clause. The parties shall abide by applicable provisions of state and federal law, including executive orders, that prohibit discrimination against any employee or applicant for employment or any applicant or recipient of services, on the basis of race, religion, color, national origin, sex, age or disabilities and that prohibit sexual harassment in the workplace.

14. Rights and Obligations.

- a. No Third-Party Beneficiaries. This Agreement is not intended to be a third-party beneficiary contract for the benefit of any third parties, including but not limited to any customer of any party, and no such persons shall have any right of subrogation or cause of action against any party for any breach or default by any party hereunder. In addition, no third parties shall have any rights hereunder that would, in any way, restrict the parties' right to modify or renew this Agreement at any time or in any manner. Nothing in this Agreement is intended to relieve or discharge the obligation or liability of any third persons to any party to this Agreement.
- b. Binding on successors in interest. This Agreement shall bind the parties hereto and their successors, heirs, assigns and representatives.
- c. Assignment. No rights or obligations of the Surveyor under this Agreement shall be assigned without the prior written consent of the District. This Agreement is voidable and subject to immediate cancellation by the District upon the Surveyor's becoming insolvent, or filing proceedings in bankruptcy or reorganization under Title XI, United States Code.

15. Disputes.

- a. Default. Except as specifically provided for herein, a default by any party in an obligation set forth herein shall not result in, or be the basis for, the termination or rescission of this Agreement.
- b. Waiver. The waiver by any party to this Agreement of a breach of any provision of this Agreement shall not be deemed to be a continuing waiver or a waiver of any subsequent breach, whether of the same or any other provision of this Agreement. Any waiver shall be in writing and signed by the waiving party.
- c. Rights and Remedies. The parties shall have all rights and remedies provided under applicable Federal or State law for a breach or threatened breach of this Agreement. These rights and remedies shall not be mutually exclusive, and the exercise of one or more of these rights and remedies shall not preclude the exercise of any other rights and remedies. Each party confirms that damages at law may be an inadequate remedy for a breach or threatened breach of any provision hereof and the respective rights and obligations of the parties hereunder shall be enforceable by specific performance, injunction, or other equitable remedy.

16. Governmental Immunity. Nothing in this Agreement shall be construed to waive the governmental immunity of the District.

17. Execution.

- a. Authorization. Each individual executing this Agreement does represent and warrant to each other so signing (and each other entity for which another person may be signing) that he or she has been duly authorized to sign this Agreement in the capacity and for the entities set forth where he or she so signs.
- b. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.
- c. Inducement. The making and execution of this Agreement has not been induced by any representation, statement, warranty, or agreement other than those herein expressed.
- d. Necessary Acts and Cooperation. The parties hereby agree to do any act or thing and to execute any and all instruments required by this Agreement and which are necessary and proper to make effective the provisions of this Agreement.

18. Interpretation.

- a. Recitals. The Recitals contained in this Agreement are incorporated into the Agreement.

- b. Paragraph Headings. The paragraph and subparagraph headings used herein are for convenience only and shall not be considered in the interpretation of this Agreement.
- c. Number and Gender. The singular shall be interpreted as the plural, and vice versa, if such treatment is necessary to interpret this Agreement in accord with the manifest intention of the parties hereto. Likewise, if either the feminine, masculine or neuter gender should be one of the other genders, it shall be so treated.
- d. Ambiguities. This Agreement has been negotiated and drafted by all parties hereto and the general rule of contract construction that 'ambiguities shall be construed against the draftsman' shall have no application to this Agreement.
- e. Partial validity. If any portion of this Agreement shall be held invalid or inoperative by a court of competent jurisdiction, then insofar as is reasonable and possible:
  - i. The remainder of this Agreement shall be considered valid and operative, and,
  - ii. Effect shall be given to the intent manifested by the portion held invalid or inoperative.
- f. Integration. All agreements heretofore made in the negotiation and preparation of this Agreement between the parties hereto are superseded by and merged into this Agreement, no statement or representation not embodied herein shall have any binding effect upon the parties hereto and there shall be no amendments hereto except those in writing signed by the parties hereto.

19. Compliance with other contracts. The Surveyor shall comply with all applicable terms and conditions of contracts, cooperative agreements, grants or other funding agreements entered into by the District with other agencies which provide funding for payment for services rendered under this Agreement.

20. Utah Law to Govern. This Agreement has been drawn and executed in the State of Utah. All questions concerning the meaning, intention and enforcement of any of its terms or its validity shall be determined in accordance with the laws of the State of Utah. In any dispute jurisdiction and venue shall be in the Fifth Judicial District Court for Washington County, State of Utah.

21. Notice. Any notice to be given or payment to be made hereunder shall have been properly given or made when received by the District or the Surveyor, as the case may be, or when deposited in the United States mail, certified or registered, postage prepaid, addressed as follows:

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT  
ATTN. TRINITY STOUT, REUSE PROJECT MANAGER  
533 EAST WATERWORKS DRIVE  
ST. GEORGE, UTAH 84770

CIVIL SCIENCE INFRASTRUCTURE, INC.  
ATTN. TYLER TURNER  
1453 S DIXIE DRIVE, STE 150  
ST. GEORGE, UTAH, 84770

22. Exhibits. The following exhibits attached hereto are incorporated herein by this reference.

Exhibit A – Scope of Work and Fee Proposal  
Exhibit B – Insurance Requirements

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement on the date first above written.

**WASHINGTON COUNTY WATER  
CONSERVANCY DISTRICT**

By:   
Zachary Renstrom, General Manager

**CIVIL SCIENCE INFRASTRUCTURE**

By: \_\_\_\_\_  
Tyler Turner, Principal

**SCOPE OF WORK AND FEE PROPOSAL**



July 30, 2025

Trinity Stout, PE  
Reuse Project Manager  
Washington County Water Conservancy District  
533 East Waterworks Drive  
St. George, UT 84770

## PROFESSIONAL SERVICES PROPOSAL

### REGIONAL REUSE SYSTEM - SURVEY & MAPPING SERVICES

Dear Mr. Stout,

We're excited to submit this proposal for professional services for the project referenced above. We are excited to partner with the Washington County Water Conservancy District (WCWCD) on this meaningful project, and we're committed to providing thoughtful, high-quality work that aligns with your goals. Our team is eager to bring its expertise and dedication to ensure the project is completed successfully and on time.

At Civil Science, we prioritize collaboration and open communication, and we're ready to work closely with your team to make this project a success. If you have any questions or need further information, don't hesitate to reach out to me directly at 435-862-1211 or via email at [tsanders@civilsience.com](mailto:tsanders@civilsience.com).

Thank you again for considering us for this opportunity. We look forward to working together and building a strong partnership.

Best regards,

Travis Sanders, PLS  
Survey Department Manager

Cody Howick, PE  
Executive, Office Manager

3160 W. Clubhouse Drive, Ste. A  
Lehi, UT 84043  
P | (801) 768-7200 | F | (801) 768-7201

1453 S. Dixie Drive, Ste. 150  
St. George, UT 84770  
P | (435) 986-0100

405 Main Street, Ste. 975  
Salt Lake City, UT 84111  
P | (801) 768-7200





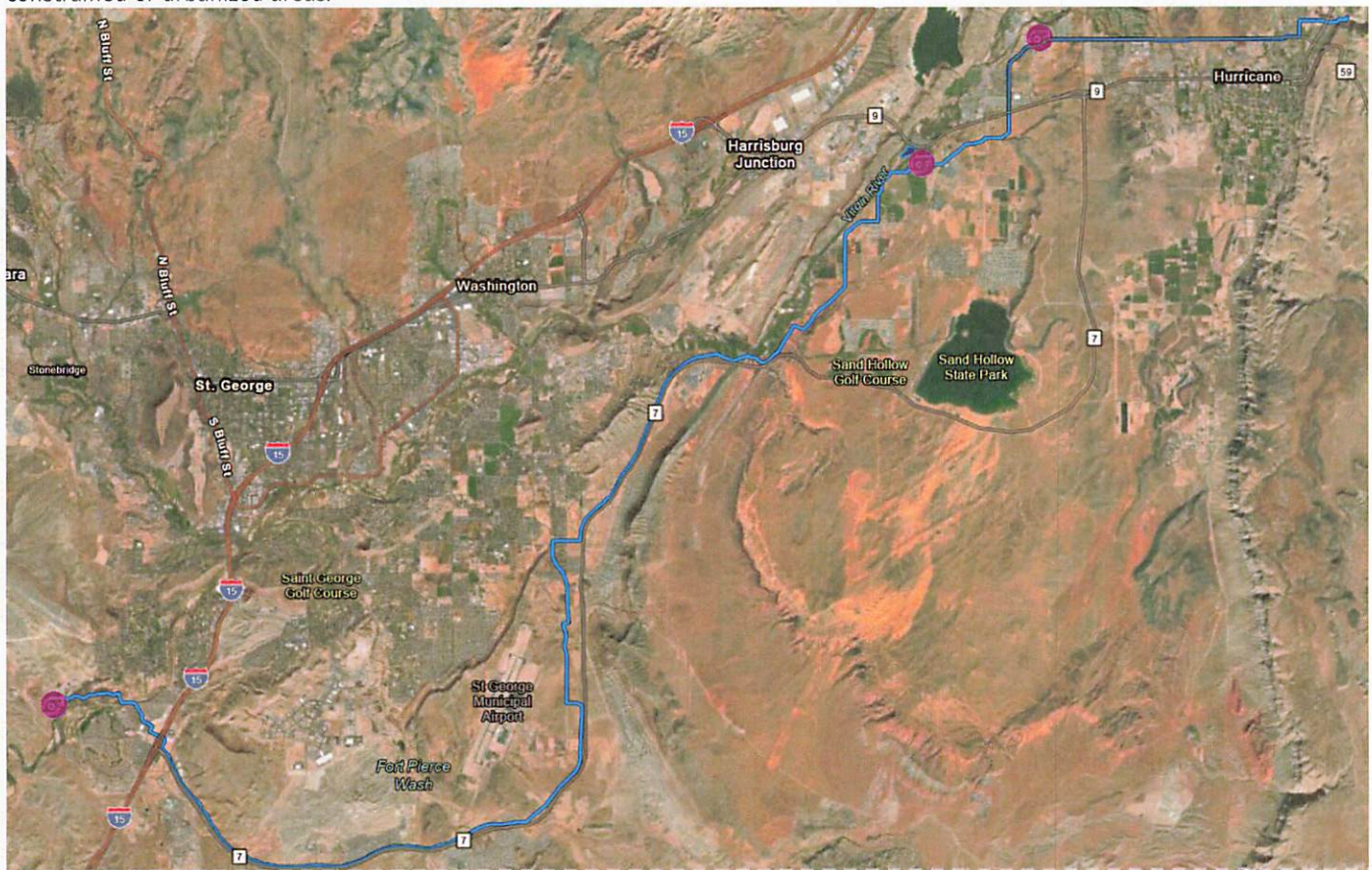
## PROJECT UNDERSTANDING

Washington County Water Conservancy District (WCWCD) is initiating a major infrastructure investment through the development of the Regional Reuse Purification System, a signature initiative in the District's 20-Year Plan. This program includes approximately 37 miles of 48-inch welded steel pipeline, segmented into 5 to 10 design packages, as well as two storage reservoirs and three pump stations (see Figure below). This scale and complexity demand a strategic, well-coordinated surveying and mapping effort that supports engineering design, permitting, and land acquisition.

We understand that the project will proceed under a task order-based contract structure, with an initial task order authorizing the foundational survey services necessary to support design progress. This includes establishing project control, capturing aerial and terrain data, and delivering base mapping products. Following that initial effort, the District anticipates issuing additional task orders aligned with a detailed annual work plan—structured by design segment and project component—which is included in our proposed scope of work and fee for the end of the year.

Our team participated in a scoping meeting with WCWCD on July 16, where we reviewed project expectations and identified value-added services that are integrated into this proposal. These include mobile LiDAR along approximately 10 miles of roadway-aligned pipeline segments, early delivery of preliminary terrain data for priority areas, and optimized data packaging for engineering teams using Autodesk Construction Cloud (ACC).

To support all design segments, we will acquire high-resolution orthoimagery and topographic elevation data, including Digital Terrain Models (DTMs), Digital Surface Models (DSMs), and 1-foot contours—all meeting ASPRS Class I accuracy standards. These datasets will be delivered in AutoCAD-compatible formats, organized by segment, and supplemented with mobile LiDAR in constrained or urbanized areas.





We will also establish a geodetic control network with at least two high-accuracy points per design segment, pump station, and reservoir site—tied to the National Spatial Reference System (NSRS) using GNSS methods. All mapping products will be aligned to NAD83 (horizontal) and NAVD88 (vertical) datums and delivered with full metadata and transformation documentation. Our team will support right-of-way and land acquisition efforts with boundary and easement surveys, legal descriptions, and parcel exhibits. All deliverables will undergo internal QA/QC review, and a final report summarizing control, methods, and accuracy will be provided.

With deep experience in linear corridor mapping and multi-disciplinary project coordination, we are well prepared to deliver precise, consistent, and interoperable geospatial data that supports each phase of this transformative water infrastructure project.

## SCOPE OF WORK

Based on the Project Understanding outlined above, Civil Science proposes to deliver the following services and tasks to support the successful execution of the project. Our approach focuses on providing comprehensive, high-quality solutions tailored to meet the project's specific goals and requirements. The proposed scope of work ensures that all phases of the project are addressed effectively, from initial planning and design to construction support and final implementation. Below, we have outlined the key tasks, deliverables and assumptions we will provide as part of this engagement.

### INITIAL SURVEY PHASE SERVICES

These services represent the essential survey tasks required to get the project underway and establish the foundation for all subsequent engineering design and land acquisition efforts for the Regional Reuse Purification System.

#### 3.1 PROJECT COORDINATION & MANAGEMENT

1. Our team will lead and facilitate a comprehensive project kickoff meeting with WCWCD and the any other consultants to establish scope, deliverable expectations, and communication protocols across all stakeholders.
2. We will prepare and maintain a detailed, task-based project schedule and work plan that outlines key milestones, internal deadlines, data handoffs, and quality control checkpoints.
3. Regular progress meetings (monthly or bi-weekly) will be attended by our project manager and technical leads to provide updates, address issues, and ensure that our work remains aligned with WCWCD's evolving project needs.
4. Our firm will serve as the central point of contact for all survey and mapping-related communications and will coordinate closely with design, ROW, and project controls teams to resolve any technical or data-related questions in a timely manner.
5. We will track project hours, task dependencies, and resource allocation throughout the duration of the project to ensure adherence to budget, scope, and schedule.
6. We will assign and manage internal staff and subconsultant resources based on workload and critical path needs.
7. We will monitor staff availability and reallocate team capacity to maintain schedule continuity and task progression.
8. Our project manager will identify risks and external interface dependencies early in the process and implement mitigation strategies to avoid rework, missed deadlines, or data conflicts across segments of the work.

#### 3.2 PROJECT AREA RESEARCH

1. Our team will conduct a basic desktop review of publicly available data sources to support survey planning and preliminary understanding of site conditions.
2. This review will include examination of available parcel data, aerial imagery, right-of-way boundaries, and public GIS layers available from Washington County, the Utah AGRC, and other government repositories.
3. No title work or deed-level research will be conducted under this task. Instead, we will rely on existing mapping records to identify known parcel boundaries, road rights-of-way, utility corridors, and public land overlays.
4. Information obtained during this desktop research will be used to inform field planning, identify potential data gaps, and establish baseline context for survey control and mapping activities.



### 3.3 AERIAL IMAGERY ACQUISITION & PROCESSING

1. High-resolution aerial orthoimagery will be acquired across a minimum 300-foot-wide corridor centered on the pipeline alignment, including all associated infrastructure sites such as pump stations and reservoirs.
2. Imagery will meet or exceed a 6-inch ground sample distance (GSD) and achieve 1-foot horizontal accuracy at a 95% confidence level, in accordance with project specifications.
3. Post-processing will include orthorectification, radiometric correction, and tiling of the imagery to ensure uniformity, clarity, and usability across all design segments.
4. All imagery will be delivered in georeferenced TIFF format compatible with AutoCAD, and preliminary imagery will be expedited for high-priority alignment segments as requested by WCWCD or design consultants.
5. Civil Science will perform an independent verification of the vertical accuracy of the aerial photogrammetry data delivered by Aerographics to ensure compliance with the mapping standards outlined in the District's RFQ.
6. Independent certification includes a Root Mean Square Error (RMSE) analysis comparing vertical control points to the processed elevation data. The results of this analysis will be documented

### 3.4 ELEVATION & TERRAIN DATA

1. Our team will perform a full topographic mapping effort using a combination of aerial LiDAR or high-accuracy photogrammetry and mobile LiDAR scanning to capture ground surface and built-environment features along the pipeline corridor.
2. Aerial methods will be used to develop a continuous Digital Terrain Model (DTM), Digital Surface Model (DSM), and 1-foot contour mapping, with vertical accuracy meeting ASPRS Class I standards.
3. In locations where the alignment follows or crosses paved roadways (approximately 10 miles total), we will deploy mobile LiDAR to capture dense, street-level point cloud data. This enables accurate extraction of curbs, pavement edges, utility structures, and other features not visible or reliably modeled from aerial sources alone.
4. Mobile LiDAR will be georeferenced and fully integrated with the aerial dataset, resulting in a comprehensive and seamless terrain model across the corridor.
5. This dual-source elevation dataset will be processed and delivered in formats compatible with AutoCAD Civil 3D and Autodesk Construction Cloud (ACC).
6. Once mobile LiDAR collection is complete, the dataset will be robust enough to support engineering design across all segments without requiring additional field crews to collect spot elevations, verify grading conditions, or supplement surface detail—saving time and reducing project cost and disruption.

### 3.5 GEODETIC CONTROL

1. A robust geodetic control network will be established by setting a minimum of two high-accuracy control points per pipeline design segment, as well as at each pump station and reservoir site.
2. These points will be surveyed using GNSS (both static and RTK) techniques and tied to the National Spatial Reference System (NSRS), ensuring system-wide positional accuracy and consistency.
3. Permanent or semi-permanent monuments will be set in the field and documented with comprehensive metadata, including coordinate values, site photos, monument types, and field notes.
4. The resulting control network will serve as the horizontal and vertical backbone for all mapping, engineering, and construction work that follows.

### 3.6 COORDINATE SYSTEM & DATUM RESOLUTION

1. All incoming and outgoing geospatial data will be evaluated and converted to a standardized coordinate system approved by the District—specifically NAD83 for horizontal data and NAVD88 for vertical data, both expressed in U.S. survey feet.
2. Our team will document the transformation workflows, including source systems, methods used, and residuals, to ensure full traceability of all spatial adjustments.
3. We will verify spatial alignment across datasets, including imagery, terrain, and control, to ensure seamless integration into engineering and CAD environments.
4. Transformation metadata and mapping layer alignment reports will be included in final documentation.



### 3.9 QUALITY ASSURANCE & REPORTING

1. A formal QA/QC program will be implemented across all phases of work to verify data quality, ensure control accuracy, and validate compliance with mapping standards.
2. Independent reviews will be performed on orthoimagery, terrain models, control points, and CAD files prior to delivery to WCWCD or its consultants.
3. All review findings, adjustments, and resolution steps will be documented in a QA/QC log, and a final report will be submitted summarizing the overall quality control process and data accuracy levels achieved.
4. This report will also include recommendations for future use and maintenance of the survey and mapping dataset.
5. Daily QA/QC reviews will be conducted with field crews to confirm survey procedures, validate field observations, and ensure alignment with project protocols.
6. Metadata will be compiled and verified throughout the project lifecycle to capture coordinate system details, collection methods, file naming conventions, and geotagged field documentation.
7. Field data will be routinely cross-checked against known control and planned acquisition parameters to identify any deviations early and initiate corrective action if needed.
8. Verification of field photographs, crew notes, and instrument settings will be incorporated into the QA/QC workflow to support traceability and final data certification.

#### DELIVERABLES

- High-resolution orthoimagery
- Processed elevation datasets
- Mobile LiDAR point cloud data
- Geodetic control dataset
- Survey control system maps
- QA/QC summary report
- Final summary report

#### ASSUMPTIONS

- Limited Field Access - Field access will be granted by WCWCD or coordinated in advance. No independent access or permissions will be secured by the survey team for private property without direction from the District.
- No Title Research or Boundary Resolution - Our team will not perform detailed title research, boundary conflict resolution, or deed interpretation unless explicitly requested under a separate task order. Legal boundary determination is outside the scope of this work.
- Use of Publicly Available Data - Parcel and right-of-way mapping will rely on publicly available GIS data and WCWCD-provided documentation. The accuracy of third-party records is assumed and not independently verified unless discrepancies are discovered during survey.
- Single-Time Acquisition of Aerial and LiDAR Data - Orthoimagery, terrain, and mobile LiDAR data will be collected once. Requests for re-flights or supplemental coverage due to design changes, construction disturbance, or schedule delays will be considered out-of-scope unless otherwise directed.
- Survey Control Is Not Construction Staking - The established geodetic control network is intended to support design and mapping, not construction layout. Construction staking or as-built verification is not included in this scope.
- Surface and Subsurface Utilities - Surface and subsurface utility investigations are not included in this scope of work. No utility locating, potholing, SUE services (Levels A-D), or coordination with Blue Stakes will be performed. Surface-visible utility features such as manholes, valve boxes, and hydrants may be included in mapping only if they are incidentally captured through mobile LiDAR or field observations, and no accuracy is guaranteed. WCWCD and its design consultants are responsible for coordinating any required utility investigations, verifications, or conflict analyses.
- Autodesk Construction Cloud (ACC) Access Provided by WCWCD - The District or its design teams will provide necessary access or guidelines for file delivery and organization within the ACC platform.
- Data Is Valid at Time of Collection - All deliverables are based on conditions observed at the time of aerial, mobile, and control data acquisition. Changes to site conditions afterward are outside of our responsibility unless a resurvey is requested.



- QA/QC Focuses on Spatial Accuracy and Format - Our QA/QC will focus on geospatial accuracy, data completeness, and conformance to CAD standards—not engineering content or legal correctness of acquisition documents.

## SUPPLEMENTAL SURVEY SERVICES

The following supplemental services are intended to support continued project momentum through the remainder of 2025 and will be provided upon request only. These services include engineering design coordination, alignment updates, and right-of-way acquisition support. At the beginning of 2026, WCWCD anticipates developing a new annual work plan based on updated priorities and project needs. At that time, these services may continue as-is, be revised and renegotiated, or phased out depending on the status of the project.

### 3.7 SUPPORT FOR ENGINEERING DESIGN TEAMS

1. We will provide continued coordination with WCWCD's engineering design consultants to respond to mapping data requests, clarify survey conditions, and adjust topographic or control data to reflect evolving design alignments.
2. Segment-specific base mapping and terrain datasets will be refined to incorporate preliminary and final alignments, structure siting, and utility conflicts as identified during design progress.
3. All revised datasets will be re-delivered in CAD-compatible formats and organized by segment to support direct import into design platforms and drawing sheets.
4. Our survey manager will remain actively involved to facilitate communication and avoid redundant fieldwork or data processing.

### 3.8 SUPPORT FOR ROW/EASEMENTS/LAND ACQUISITION TEAM

1. Boundary and cadastral-level surveys will be conducted to support the identification of ROW and easement boundaries along the pipeline corridor, in accordance with USGS Map Accuracy Standards and Utah statutory requirements.
2. We will prepare legal descriptions and accompanying exhibits for use by WCWCD's real estate and legal teams in securing land rights.
3. Each legal description will be developed with precision, using field-verified parcel data and clear callouts tied to control, and will include accompanying parcel and corridor maps in both PDF and CAD format.
4. Close coordination will be maintained with WCWCD's property acquisition teams to ensure that documents meet formatting and procedural requirements for easement filing and negotiation.

### 3.10 SUPPORT FOR PROJECT CAD STANDARDS FOR SURVEY & ROW

1. Our team will provide CAD standards support specifically focused on ensuring the consistency and usability of survey, mapping, and right-of-way (ROW) deliverables across the Regional Reuse Purification System project.
2. We will develop or adhere to WCWCD's CAD standards for survey base files, including layer naming, file structure, coordinate systems (NAD83/NAVD88), annotation styles, and object data attribution relevant to land boundaries, control points, terrain, and ROW features.
3. As legal descriptions, easement exhibits, and parcel mapping are prepared, we will ensure all CAD files follow consistent formatting that supports downstream engineering use and can be directly integrated into plan sets without additional rework.
4. We will assist design consultants by providing template base maps and XREF-ready files that are fully aligned with WCWCD's CAD requirements, coordinate systems, and file organization protocols, reducing risk of misalignment during design and permitting.
5. Our team will conduct QA/QC reviews of CAD files related to survey control, topography, ROW mapping, and easement exhibits to confirm standard adherence and flag issues before files are submitted to the District or used in engineering drawings.
6. When needed, we will troubleshoot consultant files that fail to align with survey base data, correcting coordinate shifts, broken references, or non-standard layer structures to avoid delays in ROW acquisition, design submittals, or construction planning.



### 3.11 ADDITIONAL SERVICES

The following items represent services that are not included in the base scope of work. The intent of this list is to clearly identify potential scope items that are outside the initial work plan but may be necessary to support the evolving needs of the project through the end of 2025.

1. Special Field Surveys Beyond Base Corridor - Any additional topographic, boundary, or control surveys outside the defined pipeline corridor and facility locations, including alternate alignments or realignment studies.
2. Re-surveys or Repeat Data Collection - Any re-collection of aerial imagery, mobile LiDAR, or ground control caused by schedule delays, construction disturbance, updated alignments, or external factors outside of the initial acquisition.
3. Construction Staking and Survey Layout - Survey support to contractors including staking for grading, pipeline alignment, structures, or ROW limits not included in the design-phase control establishment.
4. Legal Descriptions Beyond Base Effort - Preparation of legal descriptions and exhibits for more than initial base effort or revisions to previously completed descriptions due to design changes, updated ROW negotiations, or owner-driven adjustments.
5. Boundary Dispute Resolution or Title Research - Detailed boundary determinations involving title research, resolution of conflicts, or abstracting property records beyond publicly available parcel data.
6. Easement Negotiation or Landowner Contact - Direct coordination with property owners, including assistance in negotiating or documenting access, acquisition, or easement agreements.
7. GIS Conversion or Mapping Support - Conversion of CAD-based deliverables to GIS formats (or vice versa), geodatabase creation, or preparation of GIS-compatible survey layers not included in the standard deliverables.
8. Redesign-Driven Mapping Updates - Revisions to mapping or survey files triggered by major redesigns, scope changes, or alternate pipeline routes requested after base deliverables are completed.
9. Participation in Constructability or Value Engineering Reviews - Time spent preparing data, attending meetings, or revising mapping deliverables based on structured design review processes initiated by the owner or design teams.
10. Emergency Response or Out-of-Scope Field Visits - Rapid-response site visits or re-surveys caused by emergencies, damage, or urgent owner requests that fall outside normal task scheduling.
11. Property Plats and Abstracting - Preparation of official plats, certified property boundaries, or abstracting services in support of formal filings or legal transfer documentation.

#### DELIVERABLES (as requested)

- Engineering and ROW Teams Support
- Survey CAD Standards Support
- Additional Services

#### ASSUMPTIONS

- Design Coordination Is Limited to Data Support - Support to engineering teams will focus on data delivery, clarification, and alignment assistance—not on detailed design or layout services.
- CAD Standards Are for Survey and ROW Data Only - CAD support covers formatting and quality assurance of survey, mapping, and right-of-way-related deliverables only.



## FEE PROPOSAL

Civil Science proposes to complete the above outlined Scope of Work as follows:

PHASE	NO.	TASK DESCRIPTION	FEE	FEE TYPE	COMMENTS
INITIAL SURVEY	3.1	Project Coordination & Management	28,400	Lump Sum	
	3.2	Project Area Research	9,500	Lump Sum	Desktop Analysis
	3.3	Aerial Imagery Acquisition & Processing	88,800	Lump Sum	Aerographics Subconsultant
	3.4	Elevation & Terrain Data	100,600	Lump Sum	10-miles of LiDAR
	3.5	Geodetic Control	91,400	Lump Sum	
	3.6	Coordinate System & Datum Resolution	14,700	Lump Sum	
	3.9	Quality Assurance & Reporting	31,500	Lump Sum	
		<b>SUBTOTAL</b>	<b>364,900</b>	<b>Lump Sum</b>	
SUPPLEMENTAL	3.7	Engineering Team Support	*10,000	Hourly	Support Hours: 60
	3.8	ROW/Easement/LA Team Support	*10,000	Hourly	Support Hours: 70
	3.10	CAD Standards Support	*10,000	Hourly	Support Hours: 60
	3.11	Additional Services	*10,000	Hourly	Support Hours: 60
		<b>SUBTOTAL</b>	<b>*40,000</b>	<b>Hourly</b>	Up to 250 Hours of Support (if requested)

\*Civil Science may alter the distribution of compensation between individual tasks of the Scope of Work to be consistent with services actually rendered but shall not exceed the total compensation amount unless written authorization has been received from the District.

Professional fees shown are not to exceed unless upon written authorization from the District. Professional services rendered for the Hourly Fee Type will be completed by Civil Science at the rates and fees given in attached Exhibit A. The proposed fees are based upon estimated man-hours required to perform the services outline in the Scope of Work. A detailed breakdown of labor categories, hours, and associated costs is provided in Exhibit B.

## SCHEDULE

The proposed schedule reflects an aggressive timeline to support WCWCD's project milestones and early design progress. It outlines our anticipated delivery of initial survey, mapping, and CAD support services based on current understanding of priorities and sequencing. While our team is committed to responsiveness and flexibility, this schedule is subject to change based on factors outside our control—including the Notice to Proceed date, evolving design priorities, site access limitations, third-party coordination, weather conditions, and other factors.

TASK NO.	TASK DESCRIPTION	DATE OF COMPLETION
<b>Initial Survey Phase</b>		
3.1	Project Coordination & Management	Duration
3.2	Project Area Research	End of August
3.3	Aerial Imagery Acquisition & Processing	End of October
3.4	Elevation & Terrain Data	End of October
3.5	Geodetic Control	End of August
3.6	Coordinate System & Datum Resolution	End of October
3.9	Quality Assurance & Reporting	November 5, 2025
<b>Supplemental Survey Phase</b>		
3.7	Engineering Team Support	End of Year 2025
3.8	ROW/Easement/LA Team Support	End of Year 2025
3.10	CAD Standards Support	End of Year 2025
3.11	Additional Services	End of Year 2025

Invoices will be submitted monthly based on percent complete for each authorized task and tied to key deliverable milestones. The schedule and cost-loading will be reviewed at project kickoff and may be updated throughout the project to reflect actual progress, design needs, and any changes in scope or phasing as directed by WCWCD.

Month Billing	% Billed of Contract (Est.)	
	Initial Survey Phase	Supplemental Survey
August	25%	-
September	25%	25%
October	25%	25%
November	25%	25%
December	-	25%



## EXHIBIT A - CS STANDARD HOURLY RATES & FEE SCHEDULE (UT01/2025)

### LABOR RATES:

Services provided by Civil Science personnel will be invoiced at the labor categories and hourly rates identified below:

Labor Category	Hourly Labor Rate <sup>1</sup>	Labor Category	Hourly Labor Rate <sup>1</sup>
Technician I	\$92.00	Survey I	\$89.00
Technician II	\$105.00	Survey II	\$104.00
Technician III	\$118.00	Survey III	\$126.00
Technician IV	\$133.00	Survey IV	\$146.00
Technician V	\$159.00	Survey V	\$165.00
Technician VI	\$175.00	Survey VI	\$184.00
Engineer I	\$117.00	Sr. Survey	\$219.00
Engineer II	\$133.00	Survey Crew – 1-Man	\$141.00
Engineer III	\$149.00	Survey Crew – 2-Man	\$215.00
Engineer IV	\$165.00	Landscape Architect I	\$94.00
Engineer V	\$181.00	Landscape Architect II	\$115.00
Engineer VI	\$202.00	Landscape Architect III	\$134.00
Sr. Engineer	\$229.00	Landscape Architect IV	\$153.00
Admin I	\$76.00	Sr. Landscape Architect	\$175.00
Admin II	\$98.00	Visual Designer	\$146.00
Admin III	\$119.00	Project Manager I	\$149.00
Admin IV	\$137.00	Project Manager II	\$172.00
Admin V	\$168.00	Project Manager III	\$199.00
Admin VI	\$195.00		

<sup>1</sup> Rates change annually at beginning of year and may change on other occasions

### DIRECT REIMBURSABLE RATES:

Mileage	\$ 0.70 /mile (IRS std.)
Full Day Per-Diem (as necessary and agreed upon)	\$ 68 /person/day (IRS std.)
Partial Day Per-Diem (as necessary and agreed upon)	\$ 51 /person/day (IRS std.)
Lodging (as necessary and agreed upon)	\$ Cost/Night + 5% Mark Up
Outside Consultants / Subconsultants	\$ Cost + 5% Mark Up
Other Expenses or Direct Costs Occurred	\$ Cost + 5% Mark Up

**TIME CHARGES:** Time reporting for all office personnel is based upon actual time in office. Time reporting for all field work is based upon actual field work plus travel time to and from assigned office location. Time billed in 15 minutes increments.

**AUDIT PRIVILEGES:** All job audit privileges of CLIENT will extend only to review, and approval of monthly invoices submitted by CS to CLIENT. Invoices prepared and submitted by CS will include copies of source documents of all expenditures including: time, travel, subcontracts, supplies, equipment, materials, or premiums. The CLIENT may review, debate, or qualify items for payment at the time of invoice review and approval and payment of invoice. CLIENT waves post job audit privileges beyond invoice approval. CS will not retain job-related support documents or any other billing documents beyond the periodic period, review period, and collection by CS of invoices submitted.



# EXHIBIT B - WORK BREAKDOWN

## Summary:

WCWCD			BUDGET / FEE SUMMARY					
Reuse Survey & Mapping Services 2025			Hours	Total	Labor	Expenses	Subconsultant	Directs
Hour Derivation & Cost								
Phase	Task No.	Task Description						
\$ 28,400	3.1.1	Project Coordination, Meetings & Accounting	60	\$ 10,000	\$ 10,040	\$ -	\$ -	\$ -
	3.1.2	Project Management - Resource Coordination & Allocation	46	\$ 8,700	\$ 8,734	\$ -	\$ -	\$ -
	3.1.3	Project Management - Risk Identification & Mitigation	26	\$ 5,100	\$ 5,054	\$ -	\$ -	\$ -
	3.1.4	Project Management - Schedule and External Interface	24	\$ 4,600	\$ 4,596	\$ -	\$ -	\$ -
9,500	3.2	Project Area Research - Basic Desktop Review	68	\$ 9,500	\$ 9,452	\$ -	\$ -	\$ -
\$ 88,800	3.3.1	Aerial Imagery - Field Work & Post Processing (Aerographics)	0	\$ 66,900	\$ -	\$ -	\$ 66,859	\$ -
	3.3.2	Aerial Imagery - Photogrammetry Field Work Verification	88	\$ 13,000	\$ 12,752	\$ 280	\$ -	\$ -
	3.3.3	Aerial Imagery - Photogrammetry Certification	89	\$ 8,900	\$ 8,930	\$ -	\$ -	\$ -
\$ 100,600	3.4.1	Elevation & Terrain Data - LIDAR Field Work	240	\$ 57,300	\$ 29,920	\$ 560	\$ 26,250	\$ 525
	3.4.2	Elevation & Terrain Data - Pond Sites Field Work	32	\$ 5,100	\$ 4,512	\$ 112	\$ -	\$ 525
	3.4.3	Elevation & Terrain Data - Post Processing	76	\$ 12,800	\$ 12,844	\$ -	\$ -	\$ -
	3.4.4	Elevation & Terrain Data - Develop DTM, DSM, & Contours	200	\$ 25,400	\$ 25,400	\$ -	\$ -	\$ -
\$ 91,400	3.5.1	Geodetic Control - Field Work	520	\$ 77,000	\$ 67,780	\$ 1,260	\$ -	\$ 7,980
	3.5.2	Geodetic Control - Post Process & Documentation	88	\$ 14,400	\$ 14,432	\$ -	\$ -	\$ -
14,700	3.6	Coordinate System & Datum Resolution	128	\$ 14,700	\$ 14,664	\$ -	\$ -	\$ -
10,000	3.7	Support for Engineering Design Teams	59	\$ 10,000	\$ 10,020	\$ -	\$ -	\$ -
10,000	3.8	Support for ROW/Easement/LA Team	71	\$ 10,000	\$ 10,016	\$ -	\$ -	\$ -
\$ 31,500	3.9.1	QA & Reporting - QA/QC Plan & Reporting	46	\$ 8,400	\$ 8,354	\$ -	\$ -	\$ -
	3.9.2	QA & Reporting - Daily QA/QC reviews for Field Crews	60	\$ 9,900	\$ 9,900	\$ -	\$ -	\$ -
	3.9.3	QA & Reporting - QA/QC Metadata (notes, photos, process)	80	\$ 13,200	\$ 13,200	\$ -	\$ -	\$ -
10,000	3.10	Support for Project CAD Stds for Survey / ROW	63	\$ 10,000	\$ 9,956	\$ -	\$ -	\$ -
10,000	3.11	Additional Services	62	\$ 10,000	\$ 9,996	\$ -	\$ -	\$ -
Total			2126	\$ 404,900	\$ 300,552	\$ 2,212	\$ 93,109	\$ 9,030

## Detail:

WCWCD			LABOR AMOUNT							
Reuse Survey & Mapping Services 2025			Tyler Turner		Cody Howick		Travis Sanders		Chase Snow	
Hour Derivation & Cost			Sr. Engineer		Sr. Engineer		Survey VI		Survey V	
			\$ 229.00		\$ 229.00		\$ 184.00		\$ 165.00	
Phase	Task No.	Task Description	HR	\$	HR	\$	HR	\$	HR	\$
\$ 28,400	3.1.1	Project Coordination, Meetings & Accounting	4	\$ 916	12	\$ 2,748	24	\$ 4,416	\$ -	\$ -
	3.1.2	Project Management - Resource Coordination & Allocation	2	\$ 458	4	\$ 916	40	\$ 7,360	\$ -	\$ -
	3.1.3	Project Management - Risk Identification & Mitigation	2	\$ 458	4	\$ 916	20	\$ 3,680	\$ -	\$ -
	3.1.4	Project Management - Schedule and External Interface	\$ -	\$ -	4	\$ 916	20	\$ 3,680	\$ -	\$ -
9,500	3.2	Project Area Research - Basic Desktop Review	\$ -	\$ -	\$ -	\$ -	8	\$ 1,472	\$ -	\$ -
\$ 88,800	3.3.1	Aerial Imagery - Field Work & Post Processing (Aerographics)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.3.2	Aerial Imagery - Photogrammetry Field Work Verification	\$ -	\$ -	\$ -	\$ -	8	\$ 1,472	\$ -	\$ -
	3.3.3	Aerial Imagery - Photogrammetry Certification	\$ -	\$ -	\$ -	\$ -	8	\$ 1,472	\$ -	\$ -
	3.4.1	Elevation & Terrain Data - LIDAR Field Work	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	80	\$ 11,280
\$ 100,600	3.4.2	Elevation & Terrain Data - Pond Sites Field Work	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.4.3	Elevation & Terrain Data - Post Processing	\$ -	\$ -	\$ -	\$ -	16	\$ 2,944	60	\$ 9,900
	3.4.4	Elevation & Terrain Data - Develop DTM, DSM, & Contours	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.5.1	Geodetic Control - Field Work	\$ -	\$ -	\$ -	\$ -	20	\$ 3,680	20	\$ 3,300
\$ 91,400	3.5.2	Geodetic Control - Post Process & Documentation	\$ -	\$ -	\$ -	\$ -	8	\$ 1,472	\$ -	\$ -
	3.6	Coordinate System & Datum Resolution	\$ -	\$ -	\$ -	\$ -	8	\$ 1,472	16	\$ 2,640
	3.7	Support for Engineering Design Teams	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	28	\$ 5,152
	3.8	Support for ROW/Easement/LA Team	\$ -	\$ -	\$ -	\$ -	2	\$ 368	\$ -	\$ -
\$ 31,500	3.9.1	QA & Reporting - QA/QC Plan & Reporting	2	\$ 458	4	\$ 916	20	\$ 3,680	\$ -	\$ -
	3.9.2	QA & Reporting - Daily QA/QC reviews for Field Crews	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	40	\$ 6,600
	3.9.3	QA & Reporting - QA/QC Metadata (notes, photos, process)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.10	Support for Project CAD Stds for Survey / ROW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10,000	3.11	Additional Services	\$ -	\$ -	\$ -	\$ -	20	\$ 3,680	20	\$ 3,300
<b>Total</b>			<b>10</b>	<b>\$ 2,290</b>	<b>28</b>	<b>\$ 6,412</b>	<b>250</b>	<b>\$ 46,000</b>	<b>156</b>	<b>\$ 25,740</b>

## Detail (Cont'd):

WCWCD			LABOR AMOUNT								REIMBURSABLE EXPENSE		SUBCONSULTANT	
Reuse Survey & Mapping Services 2025			Mathew Corbin		David Viets		Paul Wilson		Dawson Rosenkrantz		Kyler Gibb		Justin Mitchell	
Hour Derivation & Cost			Technician V		Technician IV		Technician IV		Technician III		Technician I		Technician I	
			\$ 159.00		\$ 133.00		\$ 133.00		\$ 118.00		\$ 92.00		\$ 92.00	
Phase	Task No.	Task Description	HR	\$	HR	\$	HR	\$	HR	\$	HR	\$	HR	\$
\$ 28,400	3.1.1	Project Coordination, Meetings & Accounting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	20	\$ 1,960
	3.1.2	Project Management - Resource Coordination & Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.1.3	Project Management - Risk Identification & Mitigation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.1.4	Project Management - Schedule and External Interface	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9,500	3.2	Project Area Research - Basic Desktop Review	\$ -	\$ -	60	\$ 7,980	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 88,800	3.3.1	Aerial Imagery - Field Work & Post Processing (Aerographics)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.3.2	Aerial Imagery - Photogrammetry Field Work Verification	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	400	\$ 280
	3.3.3	Aerial Imagery - Photogrammetry Certification	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1	\$ 98
	3.4.1	Elevation & Terrain Data - LIDAR Field Work	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	80	\$ 7,360	\$ -	\$ -	\$ -	\$ -
\$ 100,600	3.4.2	Elevation & Terrain Data - Pond Sites Field Work	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.4.3	Elevation & Terrain Data - Post Processing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.4.4	Elevation & Terrain Data - Develop DTM, DSM, & Contours	40	\$ 6,360	80	\$ 10,640	\$ -	\$ -	40	\$ 4,720	\$ -	\$ -	\$ -	\$ -
	3.5.1	Geodetic Control - Field Work	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ 91,400	3.5.2	Geodetic Control - Post Process & Documentation	40	\$ 6,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	80	\$ 7,360	\$ -	\$ -
	3.6	Coordinate System & Datum Resolution	\$ -	\$ -	24	\$ 3,192	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.7	Support for Engineering Design Teams	30	\$ 4,770	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1	\$ 98
	3.8	Support for ROW/Easement/LA Team	\$ -	\$ -	\$ -	\$ -	48	\$ 6,384	\$ -	\$ -	\$ -	\$ -	3	\$ 294
\$ 31,500	3.9.1	QA & Reporting - QA/QC Plan & Reporting	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.9.2	QA & Reporting - Daily QA/QC reviews for Field Crews	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.9.3	QA & Reporting - QA/QC Metadata (notes, photos, process)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	3.10	Support for Project CAD Stds for Survey / ROW	62	\$ 9,858	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	1	\$ 98
10,000	3.11	Additional Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2	\$ 196
<b>Total</b>			<b>172</b>	<b>\$ 27,348</b>	<b>104</b>	<b>\$ 13,832</b>	<b>108</b>	<b>#####</b>	<b>40</b>	<b>\$ 4,720</b>	<b>160</b>	<b>\$ 14,720</b>	<b>200</b>	<b>\$ 18,400</b>

Extra Survey Unit Rental \$ 88,675 \$ 93,109 \$ 8,600 \$ 9,030  
 Paint \$ 600  
 Rebar \$ 500  
 Caps \$ 500  
 Aerial Targets \$ 1,000

**INSURANCE AND BOND REQUIREMENTS FOR  
PARTIES ENTERING INTO AGREEMENTS WITH WASHINGTON COUNTY WATER  
CONSERVANCY DISTRICT**

Surveyor shall maintain, at no cost to the District, the following insurance, and provide evidence of compliance satisfactory to District.

**A. MINIMUM LIMITS OF INSURANCE**

Except as approved in writing by District in advance, Surveyor and all of Surveyor's sub-contractors shall maintain limits no less than:

**1. GENERAL LIABILITY (including claims arising from: premises-operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract.):**

- |  |                |
|--|----------------|
| i. Comprehensive general liability insurance : |                |
| 1. \$3,000,000                                 | Aggregate      |
| 2. \$1,000,000                                 | Per Occurrence |
| ii. Property Damage                            |                |
| 1. \$1,000,000                                 |                |
| iii. Professional Liability:                   |                |
| 1. \$3,000,000                                 | Aggregate      |
| 2. \$2,000,000                                 | Per Occurrence |

**B. DEDUCTIBLES AND SELF-INSURED RETENTIONS**

Any deductibles or self-insured retentions (SIRs) must be declared to and approved by the District in writing. At the option of the District, either; the insurer may be required to reduce or eliminate such deductibles or SIRs as respects the District, its trustees, officers, and employees as additional insureds; or the Consultant may be required to procure a bond or other instrument guaranteeing payment of losses and related investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds.

The District does not ordinarily approve deductibles in an amount exceeding 2.5% of the required minimum limits described above or \$50,000, whichever is less. The District does not ordinarily approve SIRs in an amount exceeding 1.0% of the required minimum limits described above or \$20,000, whichever is less. With respect to any deductible or SIR, the Consultant shall pay for costs related to losses, investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds that would otherwise be covered by an insurer under the coverages described in these insurance requirements if no deductible or SIR existed

**C. ACCEPTABILITY OF INSURERS**

Insurance and bonds are to be placed with insurers admitted in the State of Utah with a Bests' rating of no less than A-, ii and in the limits as listed in this document, unless approved in writing by the District.

**D. VERIFICATION OF COVERAGE**

Consultant and all of Surveyor's Sub-Contractor's shall furnish District with certificates of insurance and with original endorsements effecting coverage required

by this clause. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be provided on forms acceptable to the District before work commences. District reserves the right to require complete, certified copies of all required insurance policies, with all endorsements, at any time. Consultant shall provide an insurance certificate and an endorsement evidencing compliance with this provision at least annually. From time to time District may increase the requirement for a liability limit by providing reasonable written notice to Consultant of such a change.

**SURVEYOR AGREEMENT**  
***(Regional Reuse – Survey and Mapping)***

This Agreement is made and entered into effective on the \_\_\_\_\_ day of \_\_\_\_\_, 2025, by and between the Washington County Water Conservancy District, a political subdivision of the State of Utah (the “District”), and Civil Science Infrastructure, a Utah corporation (the “Surveyor”).

**RECITALS**

WHEREAS, the District desires to engage a surveyor to provide surveying and mapping services for the Regional Reuse Purification System; and

WHEREAS, the Surveyor has submitted a statement of qualifications and has been selected to perform survey and mapping services for the District as more fully set forth in its Proposed Scope of Work, a copy of which is attached as Exhibit A, which is incorporated into this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, the parties agree as follows:

**SPECIFIC TERMS**

**1. Description of Services.**

The Surveyor will perform the services described in the Proposed Scope of Work (Exhibit A) in accordance with the applicable professional standards of care, in a reasonably timely, efficient, and professional manner, in accordance with this Agreement and in consultation with the District and others whom the District may identify from time to time.

**2. Task Orders.**

The District may, at its sole discretion, from time to time during the term of this Agreement issue written Task Orders for services of the Surveyor. Verbal statements describing work shall not be binding. If the Surveyor accepts the Task Order it will be signed by the Surveyor and returned to the District. The Surveyor shall receive payment based on the hourly rates and expenses as described in Exhibit A or as otherwise expressly stated in the Task Order. If the Surveyor has any question or concern regarding the contents of the Task Order, such as the Task, the expected completion date, the expenditure limit, the question, or concern shall be addressed on a timely basis with the District. Ordinarily, significant clarification should be in writing. No work on Task Orders by the Surveyor shall commence unless and until a Task Order is provided by the District to the Surveyor and returned to the District signed by the Surveyor.



### **3. Responsible Staff Members.**

Responsible principals or staff members of Surveyor, and any sub-contractors identified by name in the Proposed Scope of Work (Exhibit A) shall be committed to the providing the services provided under this Agreement. Upon submitting a request for payment for services, the Surveyor shall provide verification of the names of staff members, their respective rates, and the number of hours worked by each staff member. Responsible principals or staff members, or sub-contractors, who retire, quit, or die shall be replaced by individuals who are equally qualified, each of whom shall be subject to the District's approval under this Agreement. Failure to comply with the requirements of this provision shall be grounds for terminating this Agreement.

### **4. Payment.**

The District shall pay the Surveyor in accordance with the Fee Proposal, included in Exhibit A, pursuant to monthly invoices submitted by the Surveyor. The Surveyor will only invoice actual accrued costs. The District will remit payment to the Surveyor within 30 days of invoice receipt, subject to the following:

#### **a. Limits of payment.**

Under no circumstances shall the District make a payment to the Surveyor that exceeds the amounts specified in the Fee Proposal, for any specified line item or cumulatively, without an approved addendum to the Proposed Scope of Work and Fee Proposal.

#### **b. Withholding payment.**

The District may, at its option, withhold ten percent (10%) of any amount due if, due to the fault of the Surveyor, the work is not satisfactory to the District or if the work falls behind schedule, which amount(s) withheld will be disbursed to the Surveyor within 30 days of the Surveyor rectifying the cause for withholding to the District's satisfaction. The District may also, at its option, withhold final payment under this Agreement until receipt of all final reports and deliverables. All retained payments shall become due and payable upon satisfactory completion of the work under this Agreement and any subcontracts hereto.

#### **c. Penalties.**

When work is not completed by the deadlines set forth below, the District may reduce the payment due under this Agreement by \$100 for every day between the completion date and the date of actual completion. In addition, if work is not completed within 30 days of the specified completion date, the associated payment shall be reduced by 25%. If the deadlines set forth

below must be changed for good cause shown, the Surveyor shall submit an addendum to be approved in advance of the applicable specified deadline set forth below.

**d. Proposed Changes to Cost Estimate**

During the term of this Agreement the Surveyor may submit for the District's review any suggested changes to the Fee Proposal, including, but not limited to, changes in the personnel, rates, and expenses. Absent unusual circumstances, changes in rates or expenses will not be considered by the District unless submitted at least 180 days prior to the beginning of a new District fiscal year. The District's fiscal year is from January 1 through December 31. No changes shall be effective unless approved by the District in writing. Absent express written approval by the District, changes shall be effective only as to work or service calls requested or issued after the date the changes are accepted in writing by the District. If the parties cannot reach an agreement on proposed changes either party may terminate this Agreement. Except as described in Section 10 below, such termination shall not affect the rights and obligations of the parties under accepted, but incomplete work.

**5. Commencement and Completion.**

The work covered by this Agreement shall be completed in accordance with the schedules set forth in Proposed Scope of Work (Exhibit A), provided, however, that an extension may be requested for good cause shown.

**GENERAL TERMS**

1. Form of Deliverables. All deliverables shall be produced in both hard copy and electronic formats, including portable document format (.pdf) copies and, where applicable to the nature of the deliverable, AutoCad (.dwg) and ArcGIS shapefiles or geodatabase in the projected coordinate system of NAD 1983 State Plane Utah South FIPS 4303 Feet.

2. Ownership of Information. Title to all reports, information, data, computer data elements, and software prepared by the Surveyor in performance of this Agreement shall vest in the District unless otherwise provided for in this Agreement. Subject to applicable State and Federal laws, regulations, and contract requirements, the District shall have full and complete rights to reproduce, duplicate, disclose, and otherwise use all such information. Subject to compliance with Section 3 (Security and Confidentiality of Records), the Surveyor may publish and/or use the reports, information, data, computer data elements and software prepared in the performance of the agreement for its non-commercial, educational and research purposes only, provided, however, that no such information shall be disclosed without the prior consent of the District.

3. Security and Confidentiality of Records. District facilities are critical public infrastructure. Certain information the District must provide to the Surveyor for the Surveyor to perform its work is very security sensitive. The Surveyor will strictly comply with District written security protocols provided by the District to the Surveyor and these written security protocols may be changed from time to time by the District. Such protocols may include, but are not limited to, restrictions of numbers of copies to be kept in any form by the Surveyor, the form of the information storage, the security precautions to be followed, restrictions as to who may have access to information, the confidentiality agreement to be signed by individuals before they may be given access, the methods and means by which copies of information will be destroyed upon completion or termination, the methods and means by which

destruction will be verified to the District, the steps that will be taken by the Surveyor in the event of any breach or suspected breach of security or security protocols. District security protocols and any changes which are provided to Surveyor will be immediately complied with by the Surveyor. The Surveyor will notify the District immediately if the Surveyor has concerns or questions regarding such protocols or changes to protocols. In the event the District has not provided written security protocols, the Surveyor shall establish, maintain, and strictly comply with procedures and controls that are acceptable to the District for the purpose of assuring that no information contained in the Surveyor's records or obtained from the District or others in the course of carrying out its functions under this Agreement shall be used or disclosed by it, its agents, officers, or employees, except as is essential to the performance of duties under this Agreement. Persons requesting such information from the Surveyor shall be referred to the District for access to records in compliance with the Utah Government Records and Management Act. If the performance of duties under this Agreement requires the Surveyor to disclose information other than as is set forth in this section, prior to doing so, the Surveyor shall apply to the District for written permission to make such disclosure.

4. Independent Contractor. Both parties hereto agree that the Surveyor shall be deemed an independent contractor in the performance of this Agreement, and shall obtain and maintain all licenses, permits, and authority necessary to do business and render services under this Agreement and shall comply with all laws regarding unemployment insurance, disability insurance, and workmen's compensation. As such, the Surveyor shall have no authorization, express or implied, to bind the District to any agreement, settlement, liability, or understanding whatsoever, and agrees not to perform any acts as agent for the District, except as expressly set forth herein. Compensation stated herein shall be the total amount payable to the Surveyor by the District. The Surveyor shall be responsible for the payment of all income tax and social security amounts due as a result of payments received for the District for these contract services. Persons employed by the District and acting under the direction of the District shall not be deemed to be employees or agents of the Surveyor.

5. Subcontracts. Unless otherwise provided by the terms of this Agreement, the Surveyor shall not subcontract with any other party for the furnishing of any of the work or services contracted for herein without the prior written approval of the District. When authority to subcontract is granted, the Surveyor agrees to use written subcontracts drawn in conformity with Federal and State laws which are appropriate to the activity covered by the subcontract, which shall include all of the general provisions set forth herein and which shall apply with equal force to the subcontract as if the subcontractor were the Surveyor referred to herein. The Surveyor is responsible for contract performance whether or not subcontractors are used. The Surveyor shall submit the name of each subcontractor which the Surveyor intends to hire and, if requested, a copy of each subcontract to the District for approval at least twenty (20) days prior to its effective date.

6. Record Keeping, Audits, and Inspections. The Surveyor and any subcontractors shall maintain financial and operation records in sufficient detail to document all transactions relating to the disbursement of contract funds. The Surveyor shall make available for audit and inspection all such records relating to Agreement services, requirements, and expenditures until all audits initiated by State and Federal auditors are completed, or for a period of five years from the date of termination of this Contract, whichever is longer, and for such period as is required by any other paragraph of this Contract. Records which relate to disputes, litigation, or the settlement of claims arising out of the performance of this Contract, or to cost and expenses of this Agreement as to which exception has been taken by the District, shall be retained by the Surveyor until disposition has been made of such disputes, litigation, claims, or exceptions.

7. Completeness and Accuracy. The Surveyor shall be solely responsible for the completeness and accuracy of all of its final work product, including, but not limited to, plans, supporting data, and technical specifications prepared pursuant to this Agreement. The Surveyor shall be responsible to the District for any error or omission by any of its employees, subcontractors, or suppliers. The Surveyor shall correct all errors or omissions at its own expense. This provision is not intended to prevent the Surveyor from seeking reimbursement or indemnity from any employee, subcontractor, or supplier. Any additional cost or damages incurred by the District as a result of such errors or omissions shall be the responsibility of the Surveyor.

8. Indemnification and Insurance. In no event will any fault of the Surveyor or its employees, subcontractors, or suppliers be reapportioned to the District or its officers, trustees, or employees. The Surveyor will indemnify and hold the District and its officers, trustees, or employees harmless from any such reapportionment of fault.

Consistent with Utah Code Annotated Section 63G-6a-1203, the Surveyor will indemnify the District and its respective officers, trustees, or employees from any claim of third parties to the extent caused by the Surveyor's



breach of this Agreement or by the negligence or other fault of the Surveyor, or its employees, subcontractors, or suppliers. Any invalidity of any portion of this indemnification duty will not defeat any remaining portion of this described indemnification duty. This indemnity shall be interpreted to provide the District and its officers, trustees, and employees with indemnity to the greatest extent allowed by law. This paragraph shall survive any termination of this Agreement. The rights provided in this paragraph shall be in addition to any rights to which the District may otherwise be entitled.

Surveyor, at its own cost and expense, shall secure and maintain policies of insurance in accordance with Exhibit B. The indemnification obligation provided herein shall not be limited in any way by the obligation to maintain insurance.

9. Payment.

- a. Release of Payment. The District will not authorize payment to the Surveyor that exceeds an amount specified in this Agreement without an approved amendment to the Agreement. The District may, at its option, withhold final payment under the Agreement until receipt of all final reports and deliverables.
- b. Availability of Funds. Implementation of this Agreement shall be subject to the availability of appropriated funds. The District may cancel or suspend this Agreement without penalty if adequate funds are not appropriated or received.
- c. Waiver of Claims. Prior to acceptance of final payment, the Surveyor shall submit in writing to the District any known claim that the Surveyor or any of the Surveyor's employees, subconsultants, or subcontractors may have against the District or any of its employees. The acceptance of final payment by the Surveyor will constitute a waiver of any such claim other than those claims previously made in writing and submitted to the District. The Surveyor shall hold the District harmless from any claims, including costs and attorneys' fees, by any of Surveyor's employees, subconsultants, or subcontractors which are not made in writing prior to acceptance of final payment. The tendering of final payment by the District will not constitute a waiver of any claim the District might have against the Surveyor, whether known or unknown at the time such payment is made.

10. Term. The term of this Agreement shall be one (1) year, commencing on the date the Agreement is made, as set forth above. The term may automatically be extended for up to four successive one (1) year terms, unless notice of non-extension is given by either party at least thirty (30) days prior to end of a term.

11. Time is of the Essence. Time is of the essence with regard to this Agreement as to each covenant, term, condition, representation, warranty and provision hereof.

12. Termination. The District reserves the right, at its discretion, to terminate this Agreement, or to abandon any portion of the services provided under this Agreement at any time. In the event District terminates this Agreement or abandons any portion of the work hereunder, the District shall notify the Surveyor in writing. Immediately upon receipt of such notice, the Surveyor shall discontinue services as directed by the District and deliver to the District all drawings, technical specifications, hard copy and electronically stored information, computer programs and data, estimates, and any other documents or items of information, in whatever form or media, developed or gathered by the Surveyor in the performance of this Agreement, whether entirely or partially completed, together with all materials supplied by the District. The Surveyor shall document its services through the termination date and submit such documentation to the District for its evaluation. The Surveyor shall receive compensation for services performed up through the date of termination or abandonment.

13. Compliance with Laws.

- a. Laws and Regulations. Any and all actions performed pursuant to this Agreement will comply fully with all applicable Federal, State and local laws and regulations.
- b. Boycott Restrictions. Pursuant to Utah Code Annotated Section 63G-27-201, the Surveyor certifies that it is not currently engaged in a boycott of the State of Israel or an economic boycott. The Surveyor agrees not to engage in a boycott of the State of Israel for the duration of this Agreement. The Surveyor agrees to notify the District in writing if it begins engaging in an economic boycott.

- c. Equal Opportunity Clause. The parties shall abide by applicable provisions of state and federal law, including executive orders, that prohibit discrimination against any employee or applicant for employment or any applicant or recipient of services, on the basis of race, religion, color, national origin, sex, age or disabilities and that prohibit sexual harassment in the workplace.

14. Rights and Obligations.

- a. No Third-Party Beneficiaries. This Agreement is not intended to be a third-party beneficiary contract for the benefit of any third parties, including but not limited to any customer of any party, and no such persons shall have any right of subrogation or cause of action against any party for any breach or default by any party hereunder. In addition, no third parties shall have any rights hereunder that would, in any way, restrict the parties' right to modify or renew this Agreement at any time or in any manner. Nothing in this Agreement is intended to relieve or discharge the obligation or liability of any third persons to any party to this Agreement.
- b. Binding on successors in interest. This Agreement shall bind the parties hereto and their successors, heirs, assigns and representatives.
- c. Assignment. No rights or obligations of the Surveyor under this Agreement shall be assigned without the prior written consent of the District. This Agreement is voidable and subject to immediate cancellation by the District upon the Surveyor's becoming insolvent, or filing proceedings in bankruptcy or reorganization under Title XI, United States Code.

15. Disputes.

- a. Default. Except as specifically provided for herein, a default by any party in an obligation set forth herein shall not result in, or be the basis for, the termination or rescission of this Agreement.
- b. Waiver. The waiver by any party to this Agreement of a breach of any provision of this Agreement shall not be deemed to be a continuing waiver or a waiver of any subsequent breach, whether of the same or any other provision of this Agreement. Any waiver shall be in writing and signed by the waiving party.
- c. Rights and Remedies. The parties shall have all rights and remedies provided under applicable Federal or State law for a breach or threatened breach of this Agreement. These rights and remedies shall not be mutually exclusive, and the exercise of one or more of these rights and remedies shall not preclude the exercise of any other rights and remedies. Each party confirms that damages at law may be an inadequate remedy for a breach or threatened breach of any provision hereof and the respective rights and obligations of the parties hereunder shall be enforceable by specific performance, injunction, or other equitable remedy.

16. Governmental Immunity. Nothing in this Agreement shall be construed to waive the governmental immunity of the District.

17. Execution.

- a. Authorization. Each individual executing this Agreement does represent and warrant to each other so signing (and each other entity for which another person may be signing) that he or she has been duly authorized to sign this Agreement in the capacity and for the entities set forth where he or she so signs.
- b. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.
- c. Inducement. The making and execution of this Agreement has not been induced by any representation, statement, warranty, or agreement other than those herein expressed.
- d. Necessary Acts and Cooperation. The parties hereby agree to do any act or thing and to execute any and all instruments required by this Agreement and which are necessary and proper to make effective the provisions of this Agreement.

18. Interpretation.

- a. Recitals. The Recitals contained in this Agreement are incorporated into the Agreement.

- b. Paragraph Headings. The paragraph and subparagraph headings used herein are for convenience only and shall not be considered in the interpretation of this Agreement.
- c. Number and Gender. The singular shall be interpreted as the plural, and vice versa, if such treatment is necessary to interpret this Agreement in accord with the manifest intention of the parties hereto. Likewise, if either the feminine, masculine or neuter gender should be one of the other genders, it shall be so treated.
- d. Ambiguities. This Agreement has been negotiated and drafted by all parties hereto and the general rule of contract construction that 'ambiguities shall be construed against the draftsman' shall have no application to this Agreement.
- e. Partial validity. If any portion of this Agreement shall be held invalid or inoperative by a court of competent jurisdiction, then insofar as is reasonable and possible:
  - i. The remainder of this Agreement shall be considered valid and operative, and,
  - ii. Effect shall be given to the intent manifested by the portion held invalid or inoperative.
- f. Integration. All agreements heretofore made in the negotiation and preparation of this Agreement between the parties hereto are superseded by and merged into this Agreement, no statement or representation not embodied herein shall have any binding effect upon the parties hereto and there shall be no amendments hereto except those in writing signed by the parties hereto.

19. Compliance with other contracts. The Surveyor shall comply with all applicable terms and conditions of contracts, cooperative agreements, grants or other funding agreements entered into by the District with other agencies which provide funding for payment for services rendered under this Agreement.

20. Utah Law to Govern. This Agreement has been drawn and executed in the State of Utah. All questions concerning the meaning, intention and enforcement of any of its terms or its validity shall be determined in accordance with the laws of the State of Utah. In any dispute jurisdiction and venue shall be in the Fifth Judicial District Court for Washington County, State of Utah.

21. Notice. Any notice to be given or payment to be made hereunder shall have been properly given or made when received by the District or the Surveyor, as the case may be, or when deposited in the United States mail, certified or registered, postage prepaid, addressed as follows:

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT  
ATTN. TRINITY STOUT, REUSE PROJECT MANAGER  
533 EAST WATERWORKS DRIVE  
ST. GEORGE, UTAH 84770

CIVIL SCIENCE INFRASTRUCTURE, INC.  
ATTN. TYLER TURNER  
1453 S DIXIE DRIVE, STE 150  
ST. GEORGE, UTAH, 84770

22. Exhibits. The following exhibits attached hereto are incorporated herein by this reference.

Exhibit A – Scope of Work and Fee Proposal  
Exhibit B – Insurance Requirements

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement on the date first above written.

**WASHINGTON COUNTY WATER  
CONSERVANCY DISTRICT**

By: \_\_\_\_\_  
Zachary Renstrom, General Manager

**CIVIL SCIENCE INFRASTRUCTURE**

By: \_\_\_\_\_  
Tyler Turner, Principal

**SCOPE OF WORK AND FEE PROPOSAL**



July 30, 2025

Trinity Stout, PE  
Reuse Project Manager  
Washington County Water Conservancy District  
533 East Waterworks Drive  
St. George, UT 84770

## PROFESSIONAL SERVICES PROPOSAL

### REGIONAL REUSE SYSTEM - SURVEY & MAPPING SERVICES

Dear Mr. Stout,

We're excited to submit this proposal for professional services for the project referenced above. We are excited to partner with the Washington County Water Conservancy District (WCWCD) on this meaningful project, and we're committed to providing thoughtful, high-quality work that aligns with your goals. Our team is eager to bring its expertise and dedication to ensure the project is completed successfully and on time.

At Civil Science, we prioritize collaboration and open communication, and we're ready to work closely with your team to make this project a success. If you have any questions or need further information, don't hesitate to reach out to me directly at 435-862-1211 or via email at [tsanders@civilsience.com](mailto:tsanders@civilsience.com).

Thank you again for considering us for this opportunity. We look forward to working together and building a strong partnership.

Best regards,

Travis Sanders, PLS  
Survey Department Manager

Cody Howick, PE  
Executive, Office Manager

3160 W. Clubhouse Drive, Ste. A  
Lehi, UT 84043  
P | (801) 768-7200 | F | (801) 768-7201

1453 S. Dixie Drive, Ste. 150  
St. George, UT 84770  
P | (435) 986-0100

405 Main Street, Ste. 975  
Salt Lake City, UT 84111  
P | (801) 768-7200





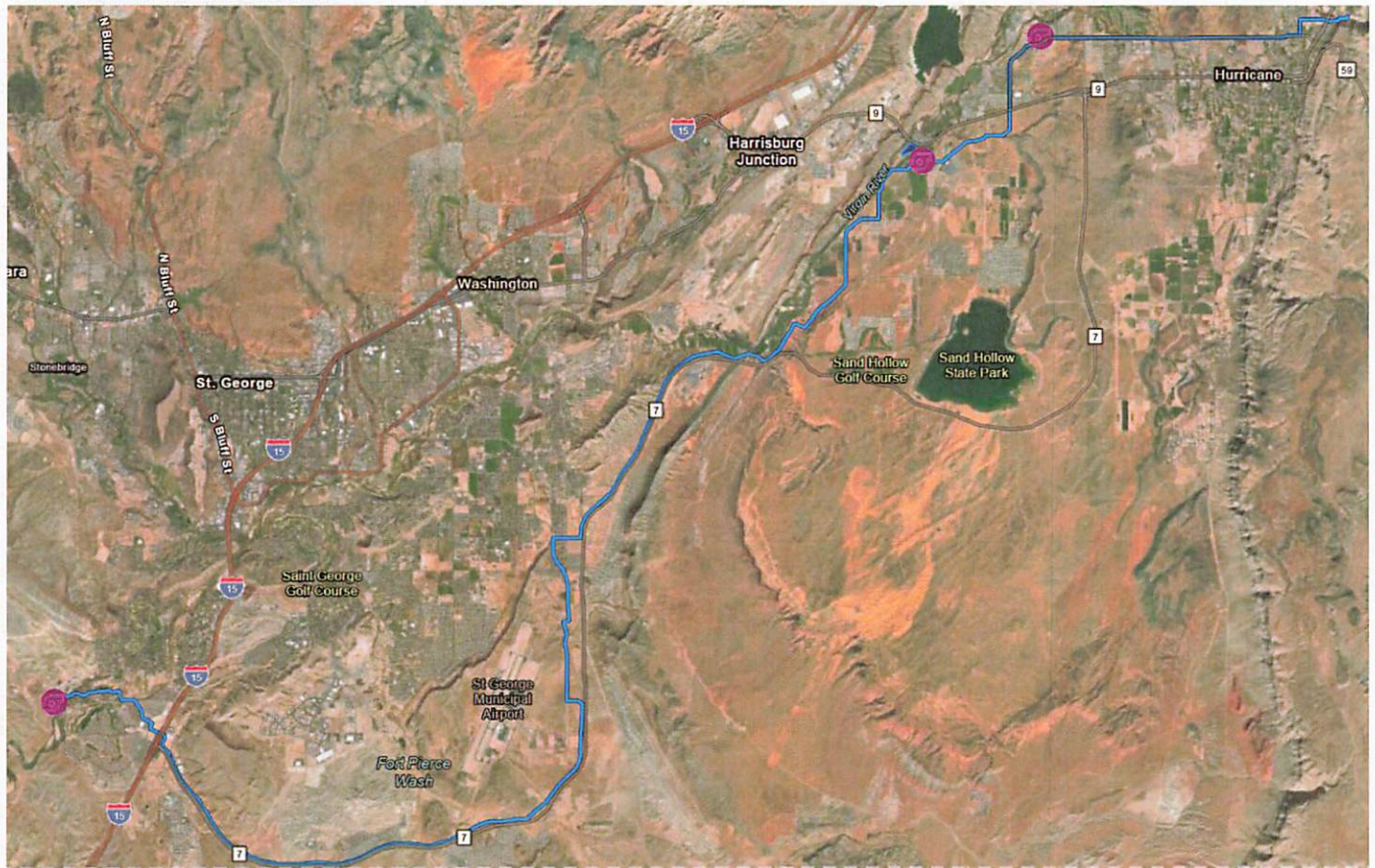
## PROJECT UNDERSTANDING

Washington County Water Conservancy District (WCWCD) is initiating a major infrastructure investment through the development of the Regional Reuse Purification System, a signature initiative in the District's 20-Year Plan. This program includes approximately 37 miles of 48-inch welded steel pipeline, segmented into 5 to 10 design packages, as well as two storage reservoirs and three pump stations (see Figure below). This scale and complexity demand a strategic, well-coordinated surveying and mapping effort that supports engineering design, permitting, and land acquisition.

We understand that the project will proceed under a task order-based contract structure, with an initial task order authorizing the foundational survey services necessary to support design progress. This includes establishing project control, capturing aerial and terrain data, and delivering base mapping products. Following that initial effort, the District anticipates issuing additional task orders aligned with a detailed annual work plan—structured by design segment and project component—which is included in our proposed scope of work and fee for the end of the year.

Our team participated in a scoping meeting with WCWCD on July 16, where we reviewed project expectations and identified value-added services that are integrated into this proposal. These include mobile LiDAR along approximately 10 miles of roadway-aligned pipeline segments, early delivery of preliminary terrain data for priority areas, and optimized data packaging for engineering teams using Autodesk Construction Cloud (ACC).

To support all design segments, we will acquire high-resolution orthoimagery and topographic elevation data, including Digital Terrain Models (DTMs), Digital Surface Models (DSMs), and 1-foot contours—all meeting ASPRS Class I accuracy standards. These datasets will be delivered in AutoCAD-compatible formats, organized by segment, and supplemented with mobile LiDAR in constrained or urbanized areas.





We will also establish a geodetic control network with at least two high-accuracy points per design segment, pump station, and reservoir site—tied to the National Spatial Reference System (NSRS) using GNSS methods. All mapping products will be aligned to NAD83 (horizontal) and NAVD88 (vertical) datums and delivered with full metadata and transformation documentation. Our team will support right-of-way and land acquisition efforts with boundary and easement surveys, legal descriptions, and parcel exhibits. All deliverables will undergo internal QA/QC review, and a final report summarizing control, methods, and accuracy will be provided.

With deep experience in linear corridor mapping and multi-disciplinary project coordination, we are well prepared to deliver precise, consistent, and interoperable geospatial data that supports each phase of this transformative water infrastructure project.

## SCOPE OF WORK

Based on the Project Understanding outlined above, Civil Science proposes to deliver the following services and tasks to support the successful execution of the project. Our approach focuses on providing comprehensive, high-quality solutions tailored to meet the project's specific goals and requirements. The proposed scope of work ensures that all phases of the project are addressed effectively, from initial planning and design to construction support and final implementation. Below, we have outlined the key tasks, deliverables and assumptions we will provide as part of this engagement.

### INITIAL SURVEY PHASE SERVICES

These services represent the essential survey tasks required to get the project underway and establish the foundation for all subsequent engineering design and land acquisition efforts for the Regional Reuse Purification System.

#### 3.1 PROJECT COORDINATION & MANAGEMENT

1. Our team will lead and facilitate a comprehensive project kickoff meeting with WCWCD and the any other consultants to establish scope, deliverable expectations, and communication protocols across all stakeholders.
2. We will prepare and maintain a detailed, task-based project schedule and work plan that outlines key milestones, internal deadlines, data handoffs, and quality control checkpoints.
3. Regular progress meetings (monthly or bi-weekly) will be attended by our project manager and technical leads to provide updates, address issues, and ensure that our work remains aligned with WCWCD's evolving project needs.
4. Our firm will serve as the central point of contact for all survey and mapping-related communications and will coordinate closely with design, ROW, and project controls teams to resolve any technical or data-related questions in a timely manner.
5. We will track project hours, task dependencies, and resource allocation throughout the duration of the project to ensure adherence to budget, scope, and schedule.
6. We will assign and manage internal staff and subconsultant resources based on workload and critical path needs.
7. We will monitor staff availability and reallocate team capacity to maintain schedule continuity and task progression.
8. Our project manager will identify risks and external interface dependencies early in the process and implement mitigation strategies to avoid rework, missed deadlines, or data conflicts across segments of the work.

#### 3.2 PROJECT AREA RESEARCH

1. Our team will conduct a basic desktop review of publicly available data sources to support survey planning and preliminary understanding of site conditions.
2. This review will include examination of available parcel data, aerial imagery, right-of-way boundaries, and public GIS layers available from Washington County, the Utah AGRC, and other government repositories.
3. No title work or deed-level research will be conducted under this task. Instead, we will rely on existing mapping records to identify known parcel boundaries, road rights-of-way, utility corridors, and public land overlays.
4. Information obtained during this desktop research will be used to inform field planning, identify potential data gaps, and establish baseline context for survey control and mapping activities.



### 3.3 AERIAL IMAGERY ACQUISITION & PROCESSING

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1. High-resolution aerial orthoimagery will be acquired across a minimum 300-foot-wide corridor centered on the pipeline alignment, including all associated infrastructure sites such as pump stations and reservoirs.
2. Imagery will meet or exceed a 6-inch ground sample distance (GSD) and achieve 1-foot horizontal accuracy at a 95% confidence level, in accordance with project specifications.
3. Post-processing will include orthorectification, radiometric correction, and tiling of the imagery to ensure uniformity, clarity, and usability across all design segments.
4. All imagery will be delivered in georeferenced TIFF format compatible with AutoCAD, and preliminary imagery will be expedited for high-priority alignment segments as requested by WCWCD or design consultants.
5. Civil Science will perform an independent verification of the vertical accuracy of the aerial photogrammetry data delivered by Aerographics to ensure compliance with the mapping standards outlined in the District's RFQ.
6. Independent certification includes a Root Mean Square Error (RMSE) analysis comparing vertical control points to the processed elevation data. The results of this analysis will be documented

### 3.4 ELEVATION & TERRAIN DATA

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1. Our team will perform a full topographic mapping effort using a combination of aerial LiDAR or high-accuracy photogrammetry and mobile LiDAR scanning to capture ground surface and built-environment features along the pipeline corridor.
2. Aerial methods will be used to develop a continuous Digital Terrain Model (DTM), Digital Surface Model (DSM), and 1-foot contour mapping, with vertical accuracy meeting ASPRS Class I standards.
3. In locations where the alignment follows or crosses paved roadways (approximately 10 miles total), we will deploy mobile LiDAR to capture dense, street-level point cloud data. This enables accurate extraction of curbs, pavement edges, utility structures, and other features not visible or reliably modeled from aerial sources alone.
4. Mobile LiDAR will be georeferenced and fully integrated with the aerial dataset, resulting in a comprehensive and seamless terrain model across the corridor.
5. This dual-source elevation dataset will be processed and delivered in formats compatible with AutoCAD Civil 3D and Autodesk Construction Cloud (ACC).
6. Once mobile LiDAR collection is complete, the dataset will be robust enough to support engineering design across all segments without requiring additional field crews to collect spot elevations, verify grading conditions, or supplement surface detail—saving time and reducing project cost and disruption.

### 3.5 GEODETIC CONTROL

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1. A robust geodetic control network will be established by setting a minimum of two high-accuracy control points per pipeline design segment, as well as at each pump station and reservoir site.
2. These points will be surveyed using GNSS (both static and RTK) techniques and tied to the National Spatial Reference System (NSRS), ensuring system-wide positional accuracy and consistency.
3. Permanent or semi-permanent monuments will be set in the field and documented with comprehensive metadata, including coordinate values, site photos, monument types, and field notes.
4. The resulting control network will serve as the horizontal and vertical backbone for all mapping, engineering, and construction work that follows.

### 3.6 COORDINATE SYSTEM & DATUM RESOLUTION

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1. All incoming and outgoing geospatial data will be evaluated and converted to a standardized coordinate system approved by the District—specifically NAD83 for horizontal data and NAVD88 for vertical data, both expressed in U.S. survey feet.
2. Our team will document the transformation workflows, including source systems, methods used, and residuals, to ensure full traceability of all spatial adjustments.
3. We will verify spatial alignment across datasets, including imagery, terrain, and control, to ensure seamless integration into engineering and CAD environments.
4. Transformation metadata and mapping layer alignment reports will be included in final documentation.



### 3.9 QUALITY ASSURANCE & REPORTING

1. A formal QA/QC program will be implemented across all phases of work to verify data quality, ensure control accuracy, and validate compliance with mapping standards.
2. Independent reviews will be performed on orthoimagery, terrain models, control points, and CAD files prior to delivery to WCWCD or its consultants.
3. All review findings, adjustments, and resolution steps will be documented in a QA/QC log, and a final report will be submitted summarizing the overall quality control process and data accuracy levels achieved.
4. This report will also include recommendations for future use and maintenance of the survey and mapping dataset.
5. Daily QA/QC reviews will be conducted with field crews to confirm survey procedures, validate field observations, and ensure alignment with project protocols.
6. Metadata will be compiled and verified throughout the project lifecycle to capture coordinate system details, collection methods, file naming conventions, and geotagged field documentation.
7. Field data will be routinely cross-checked against known control and planned acquisition parameters to identify any deviations early and initiate corrective action if needed.
8. Verification of field photographs, crew notes, and instrument settings will be incorporated into the QA/QC workflow to support traceability and final data certification.

#### DELIVERABLES

- High-resolution orthoimagery
- Processed elevation datasets
- Mobile LiDAR point cloud data
- Geodetic control dataset
- Survey control system maps
- QA/QC summary report
- Final summary report

#### ASSUMPTIONS

- Limited Field Access - Field access will be granted by WCWCD or coordinated in advance. No independent access or permissions will be secured by the survey team for private property without direction from the District.
- No Title Research or Boundary Resolution - Our team will not perform detailed title research, boundary conflict resolution, or deed interpretation unless explicitly requested under a separate task order. Legal boundary determination is outside the scope of this work.
- Use of Publicly Available Data - Parcel and right-of-way mapping will rely on publicly available GIS data and WCWCD-provided documentation. The accuracy of third-party records is assumed and not independently verified unless discrepancies are discovered during survey.
- Single-Time Acquisition of Aerial and LiDAR Data - Orthoimagery, terrain, and mobile LiDAR data will be collected once. Requests for re-flights or supplemental coverage due to design changes, construction disturbance, or schedule delays will be considered out-of-scope unless otherwise directed.
- Survey Control Is Not Construction Staking - The established geodetic control network is intended to support design and mapping, not construction layout. Construction staking or as-built verification is not included in this scope.
- Surface and Subsurface Utilities - Surface and subsurface utility investigations are not included in this scope of work. No utility locating, potholing, SUE services (Levels A-D), or coordination with Blue Stakes will be performed. Surface-visible utility features such as manholes, valve boxes, and hydrants may be included in mapping only if they are incidentally captured through mobile LiDAR or field observations, and no accuracy is guaranteed. WCWCD and its design consultants are responsible for coordinating any required utility investigations, verifications, or conflict analyses.
- Autodesk Construction Cloud (ACC) Access Provided by WCWCD - The District or its design teams will provide necessary access or guidelines for file delivery and organization within the ACC platform.
- Data Is Valid at Time of Collection - All deliverables are based on conditions observed at the time of aerial, mobile, and control data acquisition. Changes to site conditions afterward are outside of our responsibility unless a resurvey is requested.



- QA/QC Focuses on Spatial Accuracy and Format - Our QA/QC will focus on geospatial accuracy, data completeness, and conformance to CAD standards—not engineering content or legal correctness of acquisition documents.

## SUPPLEMENTAL SURVEY SERVICES

The following supplemental services are intended to support continued project momentum through the remainder of 2025 and will be provided upon request only. These services include engineering design coordination, alignment updates, and right-of-way acquisition support. At the beginning of 2026, WCWCD anticipates developing a new annual work plan based on updated priorities and project needs. At that time, these services may continue as-is, be revised and renegotiated, or phased out depending on the status of the project.

### 3.7 SUPPORT FOR ENGINEERING DESIGN TEAMS

1. We will provide continued coordination with WCWCD's engineering design consultants to respond to mapping data requests, clarify survey conditions, and adjust topographic or control data to reflect evolving design alignments.
2. Segment-specific base mapping and terrain datasets will be refined to incorporate preliminary and final alignments, structure siting, and utility conflicts as identified during design progress.
3. All revised datasets will be re-delivered in CAD-compatible formats and organized by segment to support direct import into design platforms and drawing sheets.
4. Our survey manager will remain actively involved to facilitate communication and avoid redundant fieldwork or data processing.

### 3.8 SUPPORT FOR ROW/EASEMENTS/LAND ACQUISITION TEAM

1. Boundary and cadastral-level surveys will be conducted to support the identification of ROW and easement boundaries along the pipeline corridor, in accordance with USGS Map Accuracy Standards and Utah statutory requirements.
2. We will prepare legal descriptions and accompanying exhibits for use by WCWCD's real estate and legal teams in securing land rights.
3. Each legal description will be developed with precision, using field-verified parcel data and clear callouts tied to control, and will include accompanying parcel and corridor maps in both PDF and CAD format.
4. Close coordination will be maintained with WCWCD's property acquisition teams to ensure that documents meet formatting and procedural requirements for easement filing and negotiation.

### 3.10 SUPPORT FOR PROJECT CAD STANDARDS FOR SURVEY & ROW

1. Our team will provide CAD standards support specifically focused on ensuring the consistency and usability of survey, mapping, and right-of-way (ROW) deliverables across the Regional Reuse Purification System project.
2. We will develop or adhere to WCWCD's CAD standards for survey base files, including layer naming, file structure, coordinate systems (NAD83/NAVD88), annotation styles, and object data attribution relevant to land boundaries, control points, terrain, and ROW features.
3. As legal descriptions, easement exhibits, and parcel mapping are prepared, we will ensure all CAD files follow consistent formatting that supports downstream engineering use and can be directly integrated into plan sets without additional rework.
4. We will assist design consultants by providing template base maps and XREF-ready files that are fully aligned with WCWCD's CAD requirements, coordinate systems, and file organization protocols, reducing risk of misalignment during design and permitting.
5. Our team will conduct QA/QC reviews of CAD files related to survey control, topography, ROW mapping, and easement exhibits to confirm standard adherence and flag issues before files are submitted to the District or used in engineering drawings.
6. When needed, we will troubleshoot consultant files that fail to align with survey base data, correcting coordinate shifts, broken references, or non-standard layer structures to avoid delays in ROW acquisition, design submittals, or construction planning.



### 3.11 ADDITIONAL SERVICES

The following items represent services that are not included in the base scope of work. The intent of this list is to clearly identify potential scope items that are outside the initial work plan but may be necessary to support the evolving needs of the project through the end of 2025.

1. Special Field Surveys Beyond Base Corridor - Any additional topographic, boundary, or control surveys outside the defined pipeline corridor and facility locations, including alternate alignments or realignment studies.
2. Re-surveys or Repeat Data Collection - Any re-collection of aerial imagery, mobile LiDAR, or ground control caused by schedule delays, construction disturbance, updated alignments, or external factors outside of the initial acquisition.
3. Construction Staking and Survey Layout - Survey support to contractors including staking for grading, pipeline alignment, structures, or ROW limits not included in the design-phase control establishment.
4. Legal Descriptions Beyond Base Effort - Preparation of legal descriptions and exhibits for more than initial base effort or revisions to previously completed descriptions due to design changes, updated ROW negotiations, or owner-driven adjustments.
5. Boundary Dispute Resolution or Title Research - Detailed boundary determinations involving title research, resolution of conflicts, or abstracting property records beyond publicly available parcel data.
6. Easement Negotiation or Landowner Contact - Direct coordination with property owners, including assistance in negotiating or documenting access, acquisition, or easement agreements.
7. GIS Conversion or Mapping Support - Conversion of CAD-based deliverables to GIS formats (or vice versa), geodatabase creation, or preparation of GIS-compatible survey layers not included in the standard deliverables.
8. Redesign-Driven Mapping Updates - Revisions to mapping or survey files triggered by major redesigns, scope changes, or alternate pipeline routes requested after base deliverables are completed.
9. Participation in Constructability or Value Engineering Reviews - Time spent preparing data, attending meetings, or revising mapping deliverables based on structured design review processes initiated by the owner or design teams.
10. Emergency Response or Out-of-Scope Field Visits - Rapid-response site visits or re-surveys caused by emergencies, damage, or urgent owner requests that fall outside normal task scheduling.
11. Property Plats and Abstracting - Preparation of official plats, certified property boundaries, or abstracting services in support of formal filings or legal transfer documentation.

#### DELIVERABLES (as requested)

- Engineering and ROW Teams Support
- Survey CAD Standards Support
- Additional Services

#### ASSUMPTIONS

- Design Coordination Is Limited to Data Support - Support to engineering teams will focus on data delivery, clarification, and alignment assistance—not on detailed design or layout services.
- CAD Standards Are for Survey and ROW Data Only - CAD support covers formatting and quality assurance of survey, mapping, and right-of-way-related deliverables only.



## FEE PROPOSAL

Civil Science proposes to complete the above outlined Scope of Work as follows:

PHASE	NO.	TASK DESCRIPTION	FEE	FEE TYPE	COMMENTS
INITIAL SURVEY	3.1	Project Coordination & Management	28,400	Lump Sum	
	3.2	Project Area Research	9,500	Lump Sum	Desktop Analysis
	3.3	Aerial Imagery Acquisition & Processing	88,800	Lump Sum	Aerographics Subconsultant
	3.4	Elevation & Terrain Data	100,600	Lump Sum	10-miles of LiDAR
	3.5	Geodetic Control	91,400	Lump Sum	
	3.6	Coordinate System & Datum Resolution	14,700	Lump Sum	
	3.9	Quality Assurance & Reporting	31,500	Lump Sum	
		<b>SUBTOTAL</b>	<b>364,900</b>	<b>Lump Sum</b>	
SUPPLEMENTAL	3.7	Engineering Team Support	*10,000	Hourly	Support Hours: 60
	3.8	ROW/Easement/LA Team Support	*10,000	Hourly	Support Hours: 70
	3.10	CAD Standards Support	*10,000	Hourly	Support Hours: 60
	3.11	Additional Services	*10,000	Hourly	Support Hours: 60
		<b>SUBTOTAL</b>	<b>*40,000</b>	<b>Hourly</b>	Up to 250 Hours of Support (if requested)

\*Civil Science may alter the distribution of compensation between individual tasks of the Scope of Work to be consistent with services actually rendered but shall not exceed the total compensation amount unless written authorization has been received from the District.

Professional fees shown are not to exceed unless upon written authorization from the District. Professional services rendered for the Hourly Fee Type will be completed by Civil Science at the rates and fees given in attached Exhibit A. The proposed fees are based upon estimated man-hours required to perform the services outline in the Scope of Work. A detailed breakdown of labor categories, hours, and associated costs is provided in Exhibit B.



## SCHEDULE

The proposed schedule reflects an aggressive timeline to support WCWCD's project milestones and early design progress. It outlines our anticipated delivery of initial survey, mapping, and CAD support services based on current understanding of priorities and sequencing. While our team is committed to responsiveness and flexibility, this schedule is subject to change based on factors outside our control—including the Notice to Proceed date, evolving design priorities, site access limitations, third-party coordination, weather conditions, and other factors.

TASK NO.	TASK DESCRIPTION	DATE OF COMPLETION
<b>Initial Survey Phase</b>		
3.1	Project Coordination & Management	Duration
3.2	Project Area Research	End of August
3.3	Aerial Imagery Acquisition & Processing	End of October
3.4	Elevation & Terrain Data	End of October
3.5	Geodetic Control	End of August
3.6	Coordinate System & Datum Resolution	End of October
3.9	Quality Assurance & Reporting	November 5, 2025
<b>Supplemental Survey Phase</b>		
3.7	Engineering Team Support	End of Year 2025
3.8	ROW/Easement/LA Team Support	End of Year 2025
3.10	CAD Standards Support	End of Year 2025
3.11	Additional Services	End of Year 2025

Invoices will be submitted monthly based on percent complete for each authorized task and tied to key deliverable milestones. The schedule and cost-loading will be reviewed at project kickoff and may be updated throughout the project to reflect actual progress, design needs, and any changes in scope or phasing as directed by WCWCD.

Month Billing	% Billed of Contract (Est.)	
	Initial Survey Phase	Supplemental Survey
August	25%	-
September	25%	25%
October	25%	25%
November	25%	25%
December	-	25%



## EXHIBIT A - CS STANDARD HOURLY RATES & FEE SCHEDULE (UT01/2025)

### LABOR RATES:

Services provided by Civil Science personnel will be invoiced at the labor categories and hourly rates identified below:

Labor Category	Hourly Labor Rate <sup>1</sup>	Labor Category	Hourly Labor Rate <sup>1</sup>
Technician I	\$92.00	Survey I	\$89.00
Technician II	\$105.00	Survey II	\$104.00
Technician III	\$118.00	Survey III	\$126.00
Technician IV	\$133.00	Survey IV	\$146.00
Technician V	\$159.00	Survey V	\$165.00
Technician VI	\$175.00	Survey VI	\$184.00
Engineer I	\$117.00	Sr. Survey	\$219.00
Engineer II	\$133.00	Survey Crew – 1-Man	\$141.00
Engineer III	\$149.00	Survey Crew – 2-Man	\$215.00
Engineer IV	\$165.00	Landscape Architect I	\$94.00
Engineer V	\$181.00	Landscape Architect II	\$115.00
Engineer VI	\$202.00	Landscape Architect III	\$134.00
Sr. Engineer	\$229.00	Landscape Architect IV	\$153.00
Admin I	\$76.00	Sr. Landscape Architect	\$175.00
Admin II	\$98.00	Visual Designer	\$146.00
Admin III	\$119.00	Project Manager I	\$149.00
Admin IV	\$137.00	Project Manager II	\$172.00
Admin V	\$168.00	Project Manager III	\$199.00
Admin VI	\$195.00		

<sup>1</sup> Rates change annually at beginning of year and may change on other occasions

### DIRECT REIMBURSABLE RATES:

Mileage	\$ 0.70 /mile (IRS std.)
Full Day Per-Diem (as necessary and agreed upon)	\$ 68 /person/day (IRS std.)
Partial Day Per-Diem (as necessary and agreed upon)	\$ 51 /person/day (IRS std.)
Lodging (as necessary and agreed upon)	\$ Cost/Night + 5% Mark Up
Outside Consultants / Subconsultants	\$ Cost + 5% Mark Up
Other Expenses or Direct Costs Occurred	\$ Cost + 5% Mark Up

**TIME CHARGES:** Time reporting for all office personnel is based upon actual time in office. Time reporting for all field work is based upon actual field work plus travel time to and from assigned office location. Time billed in 15 minutes increments.

**AUDIT PRIVILEGES:** All job audit privileges of CLIENT will extend only to review, and approval of monthly invoices submitted by CS to CLIENT. Invoices prepared and submitted by CS will include copies of source documents of all expenditures including: time, travel, subcontracts, supplies, equipment, materials, or premiums. The CLIENT may review, debate, or qualify items for payment at the time of invoice review and approval and payment of invoice. CLIENT waves post job audit privileges beyond invoice approval. CS will not retain job-related support documents or any other billing documents beyond the periodic period, review period, and collection by CS of invoices submitted.



# EXHIBIT B - WORK BREAKDOWN

## Summary:

WCWCD Reuse Survey & Mapping Services 2025 Hour Derivation & Cost			BUDGET / FEE SUMMARY					
			Hours	Total	Labor	Expenses	Subconsultant	Directs
Phase	Task No.	Task Description						
\$ 28,400	3.1.1	Project Coordination, Meetings & Accounting	60	\$ 10,000	\$ 10,040	\$ -	\$ -	\$ -
	3.1.2	Project Management - Resource Coordination & Allocation	46	\$ 8,700	\$ 8,734	\$ -	\$ -	\$ -
	3.1.3	Project Management - Risk Identification & Mitigation	26	\$ 5,100	\$ 5,054	\$ -	\$ -	\$ -
	3.1.4	Project Management - Schedule and External Interface	24	\$ 4,600	\$ 4,596	\$ -	\$ -	\$ -
9,500	3.2	Project Area Research - Basic Desktop Review	68	\$ 9,500	\$ 9,452	\$ -	\$ -	\$ -
\$ 88,800	3.3.1	Aerial Imagery - Field Work & Post Processing (Aerographics)	0	\$ 66,900	\$ -	\$ -	\$ 66,859	\$ -
	3.3.2	Aerial Imagery - Photogrammetry Field Work Verification	88	\$ 13,000	\$ 12,752	\$ 280	\$ -	\$ -
	3.3.3	Aerial Imagery - Photogrammetry Certification	89	\$ 8,900	\$ 8,930	\$ -	\$ -	\$ -
	3.4.1	Elevation & Terrain Data - LIDAR Field Work	240	\$ 57,300	\$ 29,920	\$ 560	\$ 26,250	\$ 525
\$ 100,600	3.4.2	Elevation & Terrain Data - Pond Sites Field Work	32	\$ 5,100	\$ 4,512	\$ 112	\$ -	\$ 525
	3.4.3	Elevation & Terrain Data - Post Processing	76	\$ 12,800	\$ 12,844	\$ -	\$ -	\$ -
	3.4.4	Elevation & Terrain Data - Develop DTM, DSM, & Contours	200	\$ 25,400	\$ 25,400	\$ -	\$ -	\$ -
	3.5.1	Geodetic Control - Field Work	520	\$ 77,000	\$ 67,780	\$ 1,260	\$ -	\$ 7,980
\$ 91,400	3.5.2	Geodetic Control - Post Process & Documentation	88	\$ 14,400	\$ 14,432	\$ -	\$ -	\$ -
	3.6	Coordinate System & Datum Resolution	128	\$ 14,700	\$ 14,664	\$ -	\$ -	\$ -
	3.7	Support for Engineering Design Teams	59	\$ 10,000	\$ 10,020	\$ -	\$ -	\$ -
	3.8	Support for ROW/Easement/LA Team	71	\$ 10,000	\$ 10,016	\$ -	\$ -	\$ -
\$ 31,500	3.9.1	QA & Reporting - QA/QC Plan & Reporting	46	\$ 8,400	\$ 8,354	\$ -	\$ -	\$ -
	3.9.2	QA & Reporting - Daily QA/QC reviews for Field Crews	60	\$ 9,900	\$ 9,900	\$ -	\$ -	\$ -
	3.9.3	QA & Reporting - QA/QC Metadata (notes, photos, process)	80	\$ 13,200	\$ 13,200	\$ -	\$ -	\$ -
	3.10	Support for Project CAD Stds for Survey / ROW	63	\$ 10,000	\$ 9,956	\$ -	\$ -	\$ -
10,000	3.11	Additional Services	62	\$ 10,000	\$ 9,996	\$ -	\$ -	\$ -
Total			2126	\$ 404,900	\$ 300,552	\$ 2,212	\$ 93,109	\$ 9,030

## Detail:

WCWCD Reuse Survey & Mapping Services 2025 Hour Derivation & Cost			LABOR AMOUNT															
			Tyler Turner	Cody Howick	Travis Sanders	Chance Snow	David Mortensen	Scott Abplanalp	Sam Rowley	Cody Brueske								
			Sr. Engineer	Sr. Engineer	Survey VI	Survey V	Survey V	Survey Crew - 1-Man	Survey Crew - 1-Man	Survey Crew - 1-Man								
			\$ 229.00	\$ 229.00	\$ 184.00	\$ 165.00	\$ 165.00	\$ 141.00	\$ 141.00	\$ 141.00								
Phase	Task No.	Task Description	HR	HR	HR	HR	HR	HR	HR	HR	\$							
\$ 28,400	3.1.1	Project Coordination, Meetings & Accounting	4	\$ 916	12	\$ 2,748	24	\$ 4,416	\$ -	\$ -	\$ -	\$ -						
	3.1.2	Project Management - Resource Coordination & Allocation	2	\$ 458	4	\$ 916	40	\$ 7,360	\$ -	\$ -	\$ -	\$ -						
	3.1.3	Project Management - Risk Identification & Mitigation	2	\$ 458	4	\$ 916	20	\$ 3,680	\$ -	\$ -	\$ -	\$ -						
	3.1.4	Project Management - Schedule and External Interface	\$ -	\$ -	4	\$ 916	20	\$ 3,680	\$ -	\$ -	\$ -	\$ -						
\$ 9,500	3.2	Project Area Research - Basic Desktop Review	\$ -	\$ -	\$ -	8	\$ 1,472	\$ -	\$ -	\$ -	\$ -	\$ -						
\$ 88,800	3.3.1	Aerial Imagery - Field Work & Post Processing (Aerographics)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						
	3.3.2	Aerial Imagery - Photogrammetry Field Work Verification	\$ -	\$ -	\$ -	8	\$ 1,472	\$ -	\$ -	40	\$ 5,640	\$ 40	\$ 5,640					
	3.3.3	Aerial Imagery - Photogrammetry Certification	\$ -	\$ -	\$ -	8	\$ 1,472	\$ -	\$ -	\$ -	\$ -	\$ -						
	3.4.1	Elevation & Terrain Data - LIDAR Field Work	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	80	\$ 11,280	\$ 80	\$ 11,280						
\$ 100,600	3.4.2	Elevation & Terrain Data - Pond Sites Field Work	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	32	\$ 4,512	\$ -	\$ -					
	3.4.3	Elevation & Terrain Data - Post Processing	\$ -	\$ -	\$ -	16	\$ 2,944	60	\$ 9,900	\$ -	\$ -	\$ -	\$ -					
	3.4.4	Elevation & Terrain Data - Develop DTM, DSM, & Contours	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
	3.5.1	Geodetic Control - Field Work	\$ -	\$ -	\$ -	20	\$ 3,680	20	\$ 3,300	40	\$ 6,600	80	\$ 11,280					
\$ 91,400	3.5.2	Geodetic Control - Post Process & Documentation	\$ -	\$ -	\$ -	8	\$ 1,472	\$ -	40	\$ 6,600	\$ -	\$ -	\$ -					
	3.6	Coordinate System & Datum Resolution	\$ -	\$ -	\$ -	8	\$ 1,472	16	\$ 2,640	\$ -	\$ -	\$ -	\$ -					
	3.7	Support for Engineering Design Teams	\$ -	\$ -	\$ -	28	\$ 5,152	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
	3.8	Support for ROW/Easement/LA Team	\$ -	\$ -	\$ -	2	\$ 368	\$ -	18	\$ 2,970	\$ -	\$ -	\$ -					
\$ 31,500	3.9.1	QA & Reporting - QA/QC Plan & Reporting	2	\$ 458	4	\$ 916	20	\$ 3,680	\$ -	20	\$ 3,300	\$ -	\$ -					
	3.9.2	QA & Reporting - Daily QA/QC reviews for Field Crews	\$ -	\$ -	\$ -	\$ -	\$ -	40	\$ 6,600	20	\$ 3,300	\$ -	\$ -					
	3.9.3	QA & Reporting - QA/QC Metadata (notes, photos, process)	\$ -	\$ -	\$ -	\$ -	\$ -	80	\$ 13,200	\$ -	\$ -	\$ -	\$ -					
	3.10	Support for Project CAD Stds for Survey / ROW	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
\$ 10,000	3.11	Additional Services	\$ -	\$ -	\$ -	20	\$ 3,680	20	\$ 3,300	\$ -	20	\$ 2,820	\$ -	\$ -				
Total			10	\$ 2,290	28	\$ 6,412	250	\$ 46,000	156	\$ 25,740	218	\$ 35,970	220	\$ 31,020	152	\$ 21,432	200	\$ 28,200

## Detail (Cont'd):

WCWCD Reuse Survey & Mapping Services 2025 Hour Derivation & Cost			LABOR AMOUNT								REIMBURSABLE EXPENSE		SUBCONSULTANT											
			Mathew Corbin	David Viets	Paul Wilson	Dawson Rosenkrantz	Kyler Gibb	Justin Mitchell	Kyle Sorensen	Jodi Bennett	Mileage (per mile)	Outside Consultants (mark up)	Other Expenses (mark up)											
			Technician V	Technician IV	Technician IV	Technician III	Technician I	Technician I	Technician I	Admin II														
			\$ 159.00	\$ 133.00	\$ 133.00	\$ 118.00	\$ 92.00	\$ 92.00	\$ 92.00	\$ 98.00	\$ 0.70	5%	5%											
Phase	Task No.	Task Description	HR	\$	HR	\$	HR	\$	HR	\$	HR	\$	Miles	\$	\$ + Mark Up	\$ + Mark Up								
\$ 28,400	3.1.1	Project Coordination, Meetings & Accounting	\$	-	\$	-	\$	-	\$	-	\$	-	20	\$ 1,960	\$	-	\$	-						
	3.1.2	Project Management - Resource Coordination & Allocation	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-						
	3.1.3	Project Management - Risk Identification & Mitigation	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-						
	3.1.4	Project Management - Schedule and External Interface	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-						
\$ 9,500	3.2	Project Area Research - Basic Desktop Review	\$	-	\$	-	60	\$ 7,980	\$	-	\$	-	\$	-	\$	-	\$	-						
	3.3.1	Aerial Imagery - Field Work & Post Processing (Aerographics)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-						
\$ 88,800	3.3.2	Aerial Imagery - Photogrammetry Field Work Verification	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-						
	3.3.3	Aerial Imagery - Photogrammetry Certification	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-						
	3.4.1	Elevation & Terrain Data - LIDAR Field Work	\$	-	\$	-	\$	-	80	\$ 7,360	\$	-	\$	-	800	\$ 560	\$ 25,000	\$ 26,250	\$ 500	\$ 525				
	3.4.2	Elevation & Terrain Data - Pond Sites Field Work	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	160	\$ 112	\$	-	\$ 500	\$ 525				
\$ 100,600	3.4.3	Elevation & Terrain Data - Post Processing	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-				
	3.4.4	Elevation & Terrain Data - Develop DTM, DSM, & Contours	40	\$ 6,360	80	\$ 10,640	\$	-	40	\$ 4,720	\$	-	40	\$ 3,680	\$	-	\$	-	\$	-				
	3.5.1	Geodetic Control - Field Work	\$	-	\$	-	\$	-	\$	-	80	\$ 7,360	\$	-	80	\$ 7,360	\$	-	1,800	\$ 1,260	\$	-	\$ 7,500	\$ 7,980
	3.5.2	Geodetic Control - Post Process & Documentation	40	\$ 6,360	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
\$ 14,700	3.6	Coordinate System & Datum Resolution	\$	-	24	\$ 3,192	\$	-	\$	-	80	\$ 7,360	\$	-	\$	-	\$	-	\$	-	\$	-		
\$ 10,000	3.7	Support for Engineering Design Teams	30	\$ 4,770	\$	-	\$	-	\$	-	\$	-	\$	-	1	\$ 98	\$	-	\$	-	\$	-		
\$ 10,000	3.8	Support for ROW/Easement/LA Team	\$	-	\$	-	48	\$ 6,384	\$	-	\$	-	\$	-	3	\$ 294	\$	-	\$	-	\$	-		
\$ 31,500	3.9.1	QA & Reporting - QA/QC Plan & Reporting	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
	3.9.2	QA & Reporting - Daily QA/QC reviews for Field Crews	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
	3.9.3	QA & Reporting - QA/QC Metadata (notes, photos, process)	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
	3.10	Support for Project CAD Stds for Survey / ROW	62	\$ 9,858	\$	-	\$	-	\$	-	\$	-	\$	-	1	\$ 98	\$	-	\$	-	\$	-		
\$ 10,000	3.11	Additional Services	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	2	\$ 196	\$	-	\$	-	\$	-		
Total			172	\$ 27,348	104	\$ 13,832	108	#####	40	\$ 4,720	160	\$ 14,720	200	\$ 18,400	80	\$ 7,360	28	\$ 2,744	3,160	\$ 2,212	\$ 88,675	\$ 93,109	\$ 8,600	\$ 9,030
																Extra Survey Unit Rental		\$ 6,000	\$ 200x30day					
																Paint		\$ 600						
																Rebar		\$ 500						
																Caps		\$ 500						
																Aerial Targets		\$ 1,000						



**INSURANCE AND BOND REQUIREMENTS FOR  
PARTIES ENTERING INTO AGREEMENTS WITH WASHINGTON COUNTY WATER  
CONSERVANCY DISTRICT**

Surveyor shall maintain, at no cost to the District, the following insurance, and provide evidence of compliance satisfactory to District.

**A. MINIMUM LIMITS OF INSURANCE**

Except as approved in writing by District in advance, Surveyor and all of Surveyor's sub-contractors shall maintain limits no less than:

**1. GENERAL LIABILITY (including claims arising from: premises-operations, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract.):**

**i. Comprehensive general liability insurance :**

1. \$3,000,000	Aggregate
2. \$1,000,000	Per Occurrence

**ii. Property Damage**

1. \$1,000,000

**iii. Professional Liability:**

1. \$3,000,000	Aggregate
2. \$2,000,000	Per Occurrence

**B. DEDUCTIBLES AND SELF-INSURED RETENTIONS**

Any deductibles or self-insured retentions (SIRs) must be declared to and approved by the District in writing. At the option of the District, either; the insurer may be required to reduce or eliminate such deductibles or SIRs as respects the District, its trustees, officers, and employees as additional insureds; or the Consultant may be required to procure a bond or other instrument guaranteeing payment of losses and related investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds.

The District does not ordinarily approve deductibles in an amount exceeding 2.5% of the required minimum limits described above or \$50,000, whichever is less. The District does not ordinarily approve SIRs in an amount exceeding 1.0% of the required minimum limits described above or \$20,000, whichever is less. With respect to any deductible or SIR, the Consultant shall pay for costs related to losses, investigations, claim distribution, and defense expenses of the District, its trustees, officers, and employees as additional insureds that would otherwise be covered by an insurer under the coverages described in these insurance requirements if no deductible or SIR existed

**C. ACCEPTABILITY OF INSURERS**

Insurance and bonds are to be placed with insurers admitted in the State of Utah with a Bests' rating of no less than A-, ii and in the limits as listed in this document, unless approved in writing by the District.

**D. VERIFICATION OF COVERAGE**

Consultant and all of Surveyor's Sub-Contractor's shall furnish District with certificates of insurance and with original endorsements effecting coverage required

by this clause. The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be provided on forms acceptable to the District before work commences. District reserves the right to require complete, certified copies of all required insurance policies, with all endorsements, at any time. Consultant shall provide an insurance certificate and an endorsement evidencing compliance with this provision at least annually. From time to time District may increase the requirement for a liability limit by providing reasonable written notice to Consultant of such a change.

# **INTERLOCAL AGREEMENT BETWEEN THE CITY OF ST. GEORGE AND THE WASHINGTON COUNTY WATER CONSERVANCY DISTRICT REGARDING THE GRAVEYARD WASH RESERVOIR AND THE SAND HOLLOW MITIGATION AREA**

Effective \_\_\_\_\_, this Interlocal Agreement (Agreement) is made between Washington County Water Conservancy District (District) and St. George City (City). The District and the City may be referred to herein individually as a “Party” or collectively as the “Parties.”

## **I. AUTHORITY**

The statutes authorizing the District to enter into this Agreement and engage in the activities described herein include but are not limited to Utah Code Sections 11-13-101 *et seq.* (Interlocal Cooperation Act), 17B-1-101 *et seq.* (Special Districts), and 17B-2a-1001 *et seq.* (Water Conservancy District Act).

The statutes authorizing City to enter into this Agreement and engage in the activities described herein include but are not limited to Utah Code Sections 11-13-101 *et seq.* (Interlocal Cooperation Act) and 10-8-1 *et seq.* (Municipal General Powers).

## **II. PURPOSE**

The purpose of this Agreement is to establish a collaborative framework between the District and City for the development and operation of the Graveyard Wash Reservoir (Reservoir) and Sand Hollow Wash Mitigation Area (Mitigation Area). This Agreement outlines the roles, responsibilities, and financial commitments of each Party in permitting, designing, constructing, and operating the Reservoir and Mitigation Area in furtherance of long-term regional water resiliency and sustainability.

## **III. BACKGROUND**

The District, in partnership with the City and Ash Creek Special Service District, is designing, permitting, constructing, and operating the Regional Reuse Purification System (System). The System is an integrated water infrastructure network comprised of reclamation facilities, advanced water purification technology, conveyance infrastructure, and storage facilities. It is a critical strategy developed to produce a local, reliable, drought-proof water source that can meet Washington County’s water needs now and in the future.

As part of the System, the Reservoir will store Type I reuse water from the St. George Regional Water Reclamation Facility. This stored water will serve irrigation demands and free up current irrigation water sources, such as water from Gunlock Reservoir, for drinking water. The District’s planned Westside Water Treatment Plant will treat the exchanged Gunlock Reservoir water to drinking standards for delivery to its Regional Water Supply Agreement partners, including the City.

The Reservoir will be designed, constructed, owned, and operated by the City. In support of this effort, the District has contributed technical expertise and incurred attorney and consultant fees

supporting the City in (a) securing environmental permits and state discharge permits, (b) performing design review, (c) acquiring private land for the Reservoir, and (d) identifying and developing required plans for the Mitigation Area.

#### **IV. RESPONSIBILITIES OF PARTIES**

To accomplish the purpose described above, the Parties respectively agree to pursue in good faith the following:

**A. Washington County Water Conservancy District**

1. Support the City as the City secures local, state, and federal permits and approvals required by applicable laws to construct and operate the Reservoir and Mitigation Area.
2. Support the City in reviewing the final design for the Reservoir and Mitigation Area.
3. Contribute \$1,887,620, plus legal and closing fees, for the District to acquire private property needed to construct the Reservoir.
4. Provide project management support to the City if requested by the City, during construction of the Reservoir and Mitigation Area.

**B. St. George City**

1. Secure and maintain all local, state, and federal permits and approvals required by applicable laws to construct and operate the Reservoir and Mitigation Area.
2. Finance all costs associated with the Reservoir and Mitigation Area, except as otherwise provided in this Agreement.
3. Design, permit, and construct the Reservoir (a) in a safe, good, and workmanlike manner and in conformance with the design and applicable laws and (b) in a manner that will permit delivery of water to irrigation users in St. George and as otherwise described in this Agreement..
4. Provide District staff and consultants reasonable right of access to the Reservoir, and any portions thereof, during construction and operation, to inspect, test, and observe the Reservoir, and any work thereon.
5. Perform all operations, maintenance, repair, and replacement on the Reservoir and its appurtenant facilities in a safe, good, and workmanlike manner, in compliance with applicable laws, and in conformance with industry standards.
6. Install supervisory control and data acquisition systems for the Reservoir and provide the District access to the data.
7. Maintain appropriate insurance for the Reservoir.
8. Coordinate in good faith with the District on operation of the Reservoir to realize the benefits of the System in supplying drinking water for Washington County.



9. Design, permit, construct, and maintain the Mitigation Area in compliance with applicable laws and permits, including those issued by the United States Army Corps of Engineers (Corps) pursuant to Clean Water Act § 404, 33 U.S.C. § 1344.

## V. PAYMENT TERMS

The District's financial contribution under Section IV(A)(4) shall be contingent upon contract award by the City for construction. The City shall maintain records of all expenditures related to the Reservoir and provide the District access to such records upon written request.

## VI. MITIGATION AREA

Guidance issued by the Corps provides that "Conservation Land Use Agreements ... can be used when the governmental entity is already the owner of the compensatory mitigation land and no transfer of title will be required. These types of arrangements may also be necessary when a governmental entity is responsible for providing compensatory mitigation, and uses government land for a compensatory mitigation project, but cannot use a conservation easement or deed restriction to provide long-term protection because of statutory or regulatory restrictions applicable to government lands." *See* Corps, Compensatory Mitigation Site Protection Instrument Handbook for the Corps Regulatory Program (Guidance) at 9 (2016).

Consistent with the above Guidance, the City currently owns and operates the Mitigation Area and is responsible for providing compensatory mitigation for permitting and construction of the Reservoir. The Mitigation Area will be included and protected in compliance with applicable laws and permit requirements and pursuant to the City Park & Trail Master Plan.

Pursuant to the Compensatory Mitigation Plan Graveyard Wash Reservoir Project, Corps File No. SPK-2004-50485 (Mitigation Plan), the City agrees to develop and protect the Mitigation Area in compliance with applicable laws and permit requirements, to achieve the following objectives: (a) create new, high-value, wetland acreage; (b) enhance streams and wetlands in locations of low species diversity, low quality habitat, and/or where natural stream and wetland functions are impaired; and (c) preserve high functioning wetlands and stream segments.

To achieve the Mitigation Plan objectives, during the construction and initial monitoring phase, the City agrees to allocate sufficient funds in its capital budget to support all necessary activities, including site preparation, planting, irrigation setup, invasive species control, and initial monitoring. These costs will be included in itemized budgets and account for contingencies needed for adaptive management. To support the Mitigation Plan's long-term success, the City agrees to allocate sufficient additional funds in its capital budget to cover ongoing maintenance and monitoring efforts such as weed control, irrigation, fence maintenance, and any required replanting. These funds will extend through the required monitoring period and will remain sufficient to support site management beyond that period, as necessary. The City shall manage these funds, ensuring they remain available until performance milestones, as determined by the Corps, are met pursuant to the terms of the Clean Water Act § 404 Permit.

## VII. GENERAL

1. Amendment. This Agreement may be amended through written agreement of all Parties.
2. Termination. This Agreement will terminate when all of the Parties have fulfilled their respective commitments described above.
3. Other Agreements. Nothing in this Agreement limits any Party from entering into other agreements with one another or with third parties.
4. Release. The Parties agree to release one another from any and all loss, injury, damages, debts, obligations, claims, demands, encumbrances, deficiencies, costs, penalties, suits, proceedings, expenses whether accrued, absolute, contingent or otherwise, including, without limitation, attorney's fees and costs (whether or not suit is brought) and other liabilities of every kind, nature and description arising out of performance under this Agreement. This release shall survive any termination of this Agreement. However, if a third party were to challenge anything arising out of the performance under this Agreement, each Party will bear its own costs and incur any liabilities imposed by the third-party action.
5. No Third-Party Beneficiaries. Nothing in this Agreement is intended to create any rights, duties, or obligations by the Parties to any person or entity not a party, and this Agreement shall not be deemed to give rise to any right by any person or entity not a party against any Party to this Agreement. Nothing in this Agreement is intended to nor shall be deemed to relieve or discharge the obligation or liability of any person or entity not a party to this Agreement.
6. Authorities not altered. Nothing in this Agreement alters, limits, or supersedes the authorities and responsibilities of any Party on any matter within their respective jurisdictions. Nothing in this Agreement shall require any of the Parties to perform beyond its respective authority.
7. Financial obligations. Nothing in this Agreement shall require any of the Parties to assume any obligation or expend any sum in excess of authorization and appropriations available.
8. Immunity and defenses retained. Each Party retains all immunities and defenses provided by law with respect to any action based on or occurring as a result of this Agreement.
9. Enforceability. The Parties agree that this Agreement does not create any contractual, or any other legal obligations meant to be enforceable by operation of law.
10. Counterparts. This Agreement may be executed in counterparts.
11. Paragraph Headings. The paragraph and subparagraph headings used herein are for convenience only and shall not be considered in the interpretation of this Agreement.

12. Laws and Regulations. Any and all actions performed pursuant to this Agreement will comply fully with all applicable Federal, State and local laws and regulations.

13. Points of Contact. Each Party designates below a primary point of contact ("POC") to coordinate all matters concerning the carrying out of activities under this Agreement. Any modifications to the POC will be provided in writing to the other parties. The contacts for work related to the project are:

Party	Point of Contact	Address	Telephone	e-mail
District	Morgan Drake	533 E Waterworks Dr. St. George, UT 84770	435.673.3617	morgan@wcwcd.gov
City	Kade Bringhurst	811 E Red Hills Pkwy St. George, UT 84770	435.627.4850	Kade.bringhurst@sgcityutah.gov

Entered into and effective on the date first written above:



Zachary Renstrom, General Manager  
Washington County Water Conservancy District

Michele Randall, Mayor  
St. George City

ATTEST:

Christina Fernandez, St. George City Recorder

APPROVED AS TO FORM:

Alicia Carlton, St. George City Assistant City Attorney

Counsel for Washington County Water Conservancy District

**WHEN RECORDED MAIL TO:**

Washington County Water Cons. Dist.

Attn: Nick Stokes

533 East Waterworks Drive

St. George, Utah 84770

*Space above for County Recorder's use*  
PARCEL I.D.# 3151-A-1-HV

**DEVELOPMENT AND SERVICE AGREEMENT**  
**[Solara Communities Subdivision]**

**THIS DEVELOPMENT AND SERVICE AGREEMENT** (“**Development Agreement**”) is made and entered into as of the 4th day of August, 2025 (“**Effective Date**”) by and between the **WASHINGTON COUNTY WATER CONSERVANCY DISTRICT**, a political subdivision of the State of Utah (“**WCWCD**”), **RE DEVELOPERS LLC** and **SOLARA COMMUNITIES LLC**, Utah limited liability companies (collectively, the “**Developer**”). WCWCD and Developer may be referred to herein individually as a “**Party**,” or collectively as the “**Parties**.”

**RECITALS**

- A. Developer desires to construct a residential subdivision, named “Solara Communities,” on Property (defined below) that is owned by SOLARA COMMUNITIES LLC and will be developed by RE Developers LLC. SOLARA COMMUNITIES LLC and RE Developers LLC are affiliates and each is managed by Blue Castle Holdings, Inc.
- B. The Property is approximately 200 acres in size and located near Leeds, Utah. Developer plans to construct Solara Communities in three phases (“**Phase 1**,” “**Phase 2**,” and “**Phase 3**,” respectively). Phase 1 will include approximately 10 acres within the Property (the “**Project**”). The Project will have 74 lots, including 14 single family homes and 60 townhomes (“**Residential Lots**”). This Development Agreement only applies to the Project. Subsequent phases would require separate corresponding agreements.
- C. To provide culinary water service to the Residential Lots, Developer is designing, and will construct, the Water System (defined below). The Water System will include (i) a pump station within the Project and (ii) a storage tank (“**On-Property Storage Tank**”) and pipeline, together with all related equipment and facilities (“**On-Property Pipeline**”), located outside the Project, but within the Property.



D. Developer requested that, after its construction, WCWCD accept dedication of the Water System.

E. WCWCD is willing to accept dedication, and own and operate the Water System, for the purpose of providing water service to the Residential Lots, subject to the terms and conditions of this Agreement.

## **AGREEMENT**

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants and agreements contained in this Development Agreement and other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged by each Party), it is hereby agreed as follows:

### **ARTICLE 1 DEFINITIONS**

#### **1.1 Definitions**

In addition to the definitions found elsewhere in this Development Agreement, the following definitions shall apply:

**“Applicable Law(s)”** mean applicable local, state, and federal laws, regulations, rules and orders of any public authority, as the same may be amended from time to time.

**“Environmental Law”** means all applicable federal, state and local laws, orders, rules, regulations and requirements of every duly constituted government authority, agency or instrumentality, now existing or hereafter promulgated that relate in each case to the protection of the environment including, without limitation, environmental, health or safety laws, regulations, governmental authorizations, ordinances, rules, orders, and the common law relating to the use, refinement, recycling, handling, treatment, removal, storage, production, manufacture, transportation, disposal, emission, discharge, release or threatened release of Hazardous Substances, or otherwise relating to pollution or protection of human health or the environment or to emissions, discharges, releases or threatened releases of pollutants, contaminants, chemicals or industrial, toxic or hazardous substances or wastes into the environment (including, without limitation, ambient air, soil, surface water, ground water, wetlands, natural resources, land surface or subsurface strata), or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of pollutants, contaminants, chemicals or industrial, toxic or Hazardous Substances or wastes, as the same may be amended or modified, and as now existing or hereafter adopted.

**“Final Plat”** means a map of the Project recorded with the Washington County Recorder’s Office and prepared by a licensed professional land surveyor subdividing the Property into lots and dedicating property interests to governmental entities, including for public utilities and rights of way.

**“Hazardous Substances”** means, and will be interpreted broadly to include, any material or substance that is defined, regulated or classified under Environmental Laws, including without limitation, as: (i) a “hazardous substance” pursuant to section 101 of the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601(14) or section 311 of the Federal Water Pollution Control Act, 33 U.S.C. § 1321, as now or hereafter amended; (ii) a “hazardous waste” pursuant to section 1004 or section 3001 of the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6903, 6921, as now or hereafter amended; (iii) a toxic pollutant under section 307(a)(1) of the Federal Water Pollution Control Act, 33 U.S.C. § 1317(a)(1); (iv) a “hazardous air pollutant” under section 112 of the Clean Air Act, 42 U.S.C. § 7412, as now or hereafter amended; (v) a “hazardous material” under the Hazardous Materials Transportation Uniform Safety Act of 1990, 49 U.S.C. App. § 1802(4), as now or hereafter amended; (vi) an “extremely hazardous waste,” “restricted hazardous waste,” “pollutant,” “contaminant,” “infectious waste,” or “hazardous chemical” under any Environmental Law; (vii) a toxic or hazardous material or substance pursuant to regulations promulgated now or hereafter under the aforementioned laws or any state or local counterpart to any of the aforementioned laws; or (viii) presenting a risk to human health or the environment under other applicable federal, state or local laws, ordinances, or regulations, as now or as may be passed or promulgated in the future. Hazardous Substances shall also mean any substance that after release into the environment and upon exposure, ingestion, inhalation, or assimilation, either directly from the environment or directly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavior abnormalities, cancer, or genetic abnormalities. Hazardous Substances specifically include, but are not limited to, asbestos, mold, mildew, polychlorinated biphenyls (“PCBs”), radioactive materials including naturally occurring radionuclides, petroleum and petroleum-based derivatives, urea formaldehyde, and perfluoroalkyl acids and related synthetic amphiphilic compounds.

**“Property”** means the land owned by the Developer that is further described in Exhibit A.

**“Regional Impact Fee”** means the regional culinary water impact fees charged by WCWCD as a condition of development approval pursuant to its most recently adopted regional water impact fee facilities plan & analysis. The regional culinary water impact fees are used to mitigate the impact of new development on public infrastructure necessary for supplying water.

**“Representative(s)”** means a Board member, director, officer, member, manager, employee, or authorized agent, contractor or sub-contractor of a Party.

**“Standards”** means WCWCD’s Design and Construction Standards and Specifications, Standard Drawings, Rules and Regulations, Terms of Service, and all Applicable Law, as they may be amended from time to time. In the event of a conflict between this Development Agreement and the Standards, the terms most protective of WCWCD, as determined by WCWCD, shall apply.

**“Water System”** which may also be referred to as a potable water system, drinking water system, culinary water system, or other similar term, means all pumps and pump stations, water tanks, culinary water transmission and distribution lines, water meters and meter boxes, valves and valve boxes, pressure reducing valves, fire hydrants, culinary water system manholes, wells and any other pipes, fittings, equipment and facilities necessary to enable WCWCD to provide culinary water service within the Project.

The Water System does not include any pipes, valves, fittings, or other related equipment after WCWCD's retail water meter because this equipment is owned and maintained by the owner of each Residential Lot

## **ARTICLE 2 WATER SYSTEM AND ACCESS**

### **2.1 Design and Construction of Water System**

Developer shall design, construct, and install the Water System in strict conformance with the requirements of this Development Agreement, the Standards, and Applicable Law. The Water System shall be designed, constructed, and installed by Developer at its sole cost and expense.

### **2.2 Final Plan**

Developer shall prepare and submit a final set of construction drawings, plans, and profiles ("Final Plan") in conformance with the Standards for review and approval by WCWCD. Developer must obtain WCWCD's approval of the Final Plan before WCWCD will execute the Final Plat.

### **2.3 Project System Extensions**

Developer will, at its sole cost, connect the Water System to an existing WCWCD pipeline located at the southeast corner of the Property. Developer may be required to construct additional connections to WCWCD's regional system. Developer will be responsible to construct these additional connections, which may include pump stations, pipelines, etc., at its sole cost. To maintain contiguity of WCWCD's culinary water infrastructure and to ensure the Project meets the requirements of the Standards and Applicable Law, Developer may be required to install infrastructure not located within the Project or Property.

### **2.4 Rights of Way**

The Water System shall be installed in public streets, public utility easements, other easements, or on land dedicated to WCWCD by Developer, as further specified in the Standards. If any portion of the Water System is installed on property that is not part of the Project or Property, Developer shall acquire and grant easements, or dedicate land, to WCWCD for the applicable portions of the Water System. All property interests conveyed to WCWCD must be acceptable in both form and substance to WCWCD, in its sole discretion. In limited circumstances WCWCD may allow a portion of the Water System to be installed in existing easements that have been granted to WCWCD. Without limiting the foregoing, as part of the Project, Developer shall grant the following easements to WCWCD (before WCWCD executes the Final Plat) and dedicate the following land to WCWCD (contemporaneous with recordation of the Final Plat) in accordance with the Standards:

(a) Pump Station Lot

Developer shall convey to WCWCD the lot associated with the pump station that is within the Project and depicted in Exhibit B.

(b) Portions of On-Property Pipeline to be Located in Future Public Rights-of-Way

Portions of the On-Property Pipeline will be located within public rights-of-way that will be created by plats for Phase 2 and Phase 3, as depicted in Exhibit B ("Future ROW Pipeline Segments"). Developer shall grant to WCWCD one permanent easement, in a form approved by WCWCD, to access, operate, maintain, and replace portions of the On-Property Pipeline within the Future ROW Pipeline Segments in Phase 2. Additionally, Developer shall grant to WCWCD a second permanent easement, in a form approved by WCWCD, to access, operate, maintain, and replace portions of the On-Property Pipeline within the Future ROW Pipeline Segments in Phase 3. WCWCD agrees to terminate the applicable permanent easement when Developer records the final plat for Phase 2 or Phase 3.

(c) Portions of On-Property Pipeline to be Located Outside Future Public Rights-of-Way

Portions of the On-Property Pipeline will be located within platted lots of Phase 3, as depicted in Exhibit B ("Future Lot Pipeline Segments"). Developer shall grant to WCWCD a permanent easement, in a form approved by WCWCD, to access, operate, maintain, and replace portions of the On-Property Pipeline within the Future Lot Pipeline Segments.

(d) On-Property Storage Tank and On-Property Pipeline Located Outside Platted Lots

The On-Property Storage Tank and portions of the On-Property Pipeline are located outside platted lots, as depicted in Exhibit B. Developer shall grant to WCWCD an exclusive, permanent easement, in a form approved by WCWCD, to access, operate, maintain, and replace the On-Property Storage Tank and portions of the On-Property Pipeline located outside platted lots. WCWCD agrees to terminate the exclusive easement described in this Section 2.4(d) after Developer conveys real property to WCWCD for both the On-Property Storage Tank and portions of the On-Property Pipeline located outside platted lots in connection with the final plat for Phase 3. Developer acknowledges and agrees that WCWCD is relying on the future property conveyance described herein and that it is a material part of the consideration for WCWCD to enter this Development Agreement.

## **2.5 24-Hour Access**

Developer acknowledges and agrees that WCWCD and its personnel need to be able to access the Water System and Property at any time in order to respond to emergency situations. Developer shall ensure that WCWCD has 24-hour access to the Water System and Property. If any portion of the Water System is located within a locked area not accessible to the general public, like a gated community, the Developer shall provide WCWCD with keys, access codes, or other means of access so as to ensure that WCWCD can access the Water System at all times.



## **2.6 Development Review Fees**

Developer will pay the Development Review Fees established by WCWCD.

# **ARTICLE 3 WATER SERVICE**

## **3.1 Water Supply**

The Developer acknowledges that WCWCD has a limited water supply available for new development. WCWCD does not guarantee water availability for the completion of the Project. Nothing in this Development Agreement reserves or guarantees water for the Project. Until an individual building permit is granted and the Regional Impact Fee is paid for a lot, water service is not guaranteed. No reliance should be placed on water service availability until all required fees have been paid in full and all required permits have been granted. WCWCD shall not be held liable in the event of water shortages and the Developer assumes the risk of any water shortage.

## **3.2 Ultra Water Efficiency Standards**

The Project is subject to WCWCD's Ultra Water Efficiency Standards. Developer agrees to do such further acts, take such action, and to execute and deliver to WCWCD such additional agreements and documents as necessary to ensure the enforceability of the Ultra Water Efficiency Standards and provide notice thereof to the purchasers of the Residential Lots including, but not limited to, adding notes regarding the Ultra Water Efficiency Standards on the Final Plat; conveying conservation easements to WCWCD for the Property, in a form approved by WCWCD; and enacting provisions requiring compliance with the Ultra Water Efficiency Standards in any declarations of covenants, conditions and restrictions for the Property.

## **3.3 Reuse Water**

The Project is subject to WCWCD's requirement that wastewater treatment must be provided by an Ash Creek Special Service water reclamation facility that treats wastewater to Type 1 effluent, as defined in the Utah Administrative Code, or Developer shall construct or contract with an entity to provide a wastewater system that treats wastewater to Type 1 effluent. This is so that WCWCD water may be reclaimed and used in its reuse system. Developer acknowledges this requirement and warrants that all wastewater and effluent produced by the Project will comply with this requirement and be returned to WCWCD.

## **3.4 Impact Fees**

The Developer agrees to pay, or cause the builder who obtains a building permit to pay, the Regional Impact Fee established by WCWCD.

## **3.5 Rules and Regulations and Terms of Service**

As a condition to obtaining water service from WCWCD, the Developer and any subsequent owner of a Residential Lot, shall comply with WCWCD's Standards, including its Terms of Service, in effect at the time of service.

**ARTICLE 4**  
**CONSTRUCTION OF WATER SYSTEM AND FINAL ACCEPTANCE**

**4.1 Governmental Agency Permits**

Developer shall, at its sole cost and expense, secure, or cause to be secured, any and all permits which may be required under Applicable Laws by any governmental agency in connection with construction of the Water System. Developer's design and construction of the Water System shall comply with the Standards, including Applicable Laws.

**4.2 Construction**

(a) Materials and Equipment

Developer shall furnish all materials and equipment as shall be necessary for the construction and installation of the Water System.

(b) Responsibility for Costs

The Water System shall be constructed and installed by Developer, at Developer's sole cost and expense, in accordance with the Final Plan and the Standards.

(c) Workmanship

Developer shall perform all work in connection with the construction and installation of the Water System in a safe, good and workmanlike manner.

(d) SCADA

WCWCD shall install Supervisory Control and Data Acquisition ("SCADA") equipment necessary for it to operate the Water System. Developer shall reimburse WCWCD for all labor and material costs incurred in connection with the installation of SCADA equipment.

(e) Tank Improvements

The Developer acknowledges and agrees that it will be required to design and construct at least one water tank for the Project. All water tanks must be built in accordance with the Standards. At the discretion of WCWCD, the Developer may be permitted temporary use of storage capacity within the Cottam Retail Water System for a limited number of lots and for a limited time.

(f) Other Improvements

The Developer acknowledges that it will be required to design and construct other system improvements including, but not limited to, a pump station. All system improvements must be built in accordance with the Standards.

#### **4.3 Periodic Inspections, Testing and Approvals**

WCWCD's staff and consultants shall have the right of access to the Project and any portion thereof during construction and during the Warranty Period (defined below), to inspect, test, and observe the Water System, and any work thereon, and for all other necessary purposes.

#### **4.4 Corrections to Construction**

Developer, at its sole cost and expense, shall promptly repair and/or replace any work and/or materials that are defective, or which are otherwise not in conformity with the Standards or Final Plan.

#### **4.5 Final Plat**

Once the Water System is either installed and accepted by WCWCD and the Utah Division of Drinking Water, or the Developer has bonded for completion of the Water System in a form acceptable to WCWCD, the Developer shall provide the proposed Final Plat to WCWCD for review. Once the Developer has addressed WCWCD's comments to the proposed Final Plat, and provided that the Developer has complied with all the terms of this Development Agreement, the Standards, and Applicable Laws, WCWCD shall execute the Final Plat for the Project.

#### **4.6 Division of Drinking Water Permits and Approvals**

If Developer constructs the Water System prior to recording the Final Plat, Developer will be required to obtain an Operating Permit from the Utah Division of Drinking Water for all components of the Water System before WCWCD executes the Final Plat. If Developer bonds to allow it to complete construction of the Water System after the Final Plat is recorded, Developer shall be required to obtain an Operating Permit from the Utah Division of Drinking Water for all components of the Water System before WCWCD issues its Notice of Final Acceptance (defined below).

### **ARTICLE 5 FINAL ACCEPTANCE; TITLE TRANSFER; SERVICE**

#### **5.1 Developer's Conveyances**

When it conveys each Residential Lot, Developer shall, in the instrument of conveyance, expressly reserve and retain the Water System, including any fixtures associated with the Water System.

#### **5.2 Final Acceptance of the Water System**

WCWCD will issue its notice of final acceptance of the Water System ("Notice of Final Acceptance"), upon satisfaction of all requirements in this Development Agreement, the Standards, and Applicable Laws.

### **5.3 Transfer of Water System to WCWCD**

When WCWCD delivers the Notice of Final Acceptance, Developer shall immediately deliver to WCWCD a bill of sale and deed for the Water System and an assignment of all Utah Division of Drinking Water permits that Developer has obtained, each in a form approved by WCWCD. When WCWCD has received and accepted the assignment and the bill of sale and deed, (a) it shall assume the obligation of operation, maintenance, repair, and replacement of the Water System and (b) the Residential Lots shall be subject to WCWCD's retail water rates, as they may be amended from time to time, including standby and connection fees. Title transfer and the resulting obligations of WCWCD as set forth herein are expressly conditioned on compliance with the terms and conditions of this Development Agreement.

## **ARTICLE 6 INSURANCE AND WARRANTY**

### **6.1 Construction Insurance**

During the period beginning with the Effective Date and ending on the date that is the end of the Warranty Period (defined below), Developer shall furnish, or cause to be furnished, to WCWCD satisfactory certificates of insurance from reputable insurance companies evidencing death, bodily injury and property damage insurance policies in the amount of Two Million Dollars (\$2,000,000) single limit, naming WCWCD as an additional insured. Certificates of insurance shall be promptly submitted to WCWCD. Developer shall require that all contractors performing work in connection with the Water System shall be obligated to maintain adequate worker's compensation insurance and public liability coverage.

### **6.2 Warranty Period**

Developer shall warrant and guaranty that the Water System shall be free of defects in materials or workmanship for a period of one (1) year, commencing upon the issuance by WCWCD of the Notice of Final Acceptance ("Warranty Period").

(a) If at any time during the Warranty Period any materials or workmanship furnished by the Developer shall prove defective or be found in disrepair, Developer shall, upon written notice from WCWCD, promptly repair or replace the defective materials and/or work to the satisfaction of WCWCD.

(b) During the Warranty Period, the Developer shall be required to keep all manholes, valve and meter boxes, drains, and similar infrastructure free from all rock, dirt and other debris in order to assure WCWCD has unobstructed access for periodic inspections.

(c) Developer's warranty obligation hereunder shall be secured by the posting of required bonds with WCWCD. Notwithstanding any law or ordinance to the contrary, Developer acknowledges and agrees that WCWCD is an intended third party beneficiary of all performance, payment, warranty, and other bonds posted with Washington County, or any municipality within Washington County, in connection with the Project.



(d) Prior to the end of the Warranty Period, WCWCD shall perform a final inspection of the Water System (the "Final Warranty Inspection"). Developer shall be required to repair or replace any defective materials and/or work then existing and related to the Water System, to the satisfaction of WCWCD. Upon completion of the Final Warranty Inspection and final approval by WCWCD, WCWCD shall approve the release of bonds obtained by the Developer.

## **ARTICLE 7 INDEMNIFICATION**

Developer hereby agrees to indemnify, defend, and hold harmless WCWCD and its Representatives from and against any and all liability, judgment, loss, damage, costs, or expenses, including reasonable attorney's fees and court costs, arising from or as a result of (a) the construction activities of Developer and its Representatives; (b) any bodily injury, death of any person, or damage to real or tangible personal property caused by Developer or its Representatives; (c) any notice or claim by a contractor, subcontractor, or other person for any amounts due and owing by the Developer; (c) breach of any of the representations, warranties, or covenants under the Development Agreement by Developer; or (d) a negligent or more culpable act or omission of the Developer in the performance of its obligations under this Development Agreement. The Developer shall not be responsible for, and this indemnity shall not apply to, claims that arise as a result of negligent or more culpable acts or omissions of WCWCD, or of its agents, employees or contractors.

## **ARTICLE 8 GENERAL TERMS AND CONDITIONS**

### **8.1 Developer's Representations and Warranties**

The Developer represents and warrants that:

(a) it is the owner of the Property upon which the Project is being developed and for which services are being requested from WCWCD;

(b) the individual executing this Development Agreement and related agreements on behalf of Developer has the requisite authority to do so and Developer has agreed to be and is bound by this Development Agreement;

(c) it has not received from any governmental entity or agency having jurisdiction over or with respect to any of the Project or Water System, or from any other person or entity, any notice alleging or finding that all or any portion of the Project or Water System are in violation of any Applicable Laws;

(d) there are no agreements presently in force and effect whereby the Developer has granted to any other person or entity the right or option to purchase, lease or otherwise use the Water System, pump station lot (see Section 2.4(a)), or exclusive easement described in Section 2.4(d), or any portions thereof; and

(e) to its knowledge and unless otherwise disclosed to WCWCD in writing, the land associated with all real property interests that Developer will convey to WCWCD in connection with this Development Agreement has not been, and is not currently, in violation of any Environmental Law and is free from Hazardous Substances.

## **8.2 Default**

In the event Developer fails to perform its obligations hereunder or comply with the terms and provisions hereof, and such failure remains uncured for a period of thirty (30) days (the "Cure Period"), after receiving written notice of default from WCWCD, WCWCD may, at its discretion, pursue all rights and remedies which it may have at law and in equity, including but not limited to injunctive relief, specific performance and/or damages, and termination of the Development Agreement; provided, however, that if a default cannot reasonably be cured within the Cure Period, and the Developer has commenced to cure such default within the Cure Period and thereafter uses reasonable efforts to cure the default, then the Cure Period shall be extended for one hundred twenty (120) days (including the original period of thirty (30) days) so long as the Developer is diligently pursuing cure of the default. If, however, the default remains uncured for a period of one hundred twenty (120) days in the aggregate, then WCWCD may, at its election, pursue all rights and remedies which it may have at law and in equity, including but not limited to injunctive relief, specific performance and/or damages, and termination of the Development Agreement.

## **8.3 Entire Agreement**

This Development Agreement, together with the Exhibits attached hereto, contains the entire agreement by and between the Parties with respect to the subject matter hereof, and supersedes any prior promises, representations, warranties, inducements or understanding between the Parties which are not contained herein.

## **8.4 Non-liability of WCWCD Officials**

No Representative of WCWCD shall be personally liable to the Developer or any successor-in-interest or assignee of the Developer, in the event of any default or breach by WCWCD, or for any amount which may become due to Developer, or its successors-in-interest or assignees, or for any obligation arising under the terms of this Development Agreement.

## **8.5 No Third-Party Rights**

The obligations of Developer and WCWCD set forth in this Development Agreement shall not create any rights in or obligations to any other persons or parties except to the extent expressly provided herein.

## **8.6 Joint and Several Obligations, Representations, Knowledge, and Default**

(a) Solara Communities LLC and RE Developers LLC shall be jointly and severally liable for all of Developer's duties and obligations under this Development Agreement and for complying with the terms of this Development Agreement.

(b) All representations, warranties, covenants, and acknowledgments of Developer shall be deemed to be representations, warranties, covenants, and acknowledgments of Solara Communities LLC and RE Developers LLC.

(c) Developer's knowledge under Section 8.2(c) shall refer to the knowledge of Solara Communities LLC and RE Developers LLC.

(d) Any default hereunder shall be deemed to be a default of Solara Communities LLC and RE Developers LLC.

#### **8.7 Binding Effect; Covenants Run with the Land**

This Development Agreement shall be binding upon and inure to the benefit of the Parties hereto and upon their respective Representatives, affiliates, and assigns (where assignment has been permitted), including, without limitation, any separate affiliated entity of Developer which is involved with, assumes or undertakes to fulfill any responsibility or obligation imposed upon Developer pursuant to this Development Agreement. All of the covenants, warranties, representations, and agreements contained in this Development Agreement shall survive recording of the Final Plat; execution and recording of any deed conveying real property from Developer to WCWCD; and execution of the bill of sale and deed and shall be deemed to run with the Property. All of the terms and conditions of this Development Agreement shall extend to and be binding upon the successors and assigns of the Parties (where assignment has been permitted).

#### **8.8 Termination**

Both WCWCD and Developer shall have the right, but not the obligation, at the sole discretion of the applicable Party, to terminate this Development Agreement, in whole or in part, in the event (i) Developer has not obtained Final Plat approval from Washington County for Phase 1 of the Project within eighteen months (18 months) from the Effective Date, (ii) Developer has not started construction of the Water System within two (2) years from the Effective Date, (iii) Developer commenced construction but has not undertaken significant work towards completion of the Water System for two (2) or more years, or (iv) Developer remains in default under the material provisions of this Development Agreement after expiration of the Cure Period. Any termination of this Development Agreement pursuant hereto may be affected by giving written notice of intent to terminate to the other Party pursuant to the notice provisions set forth in Section 8.15. Unless terminated pursuant to this Section, or by separate agreement signed by the Parties, this Development Agreement shall continue in full force and effect.

#### **8.9 Recordation**

Once this Development Agreement is fully executed, Developer shall record it with the Washington County Recorder's Office and provide a copy of the recorded document to WCWCD.

#### **8.10 No Waiver**

Any Party's failure to enforce any of the provisions of this Development Agreement shall not constitute a waiver of the right to enforce such provision. The provisions of this Development

Agreement may be waived only in writing by the Party intended to be benefitted by the provision, and a waiver by a Party of a breach hereunder by the other Party shall not be construed as a waiver of any succeeding breach of the same or other provision.

#### **8.11 Severability**

If any provision of this Development Agreement is held to be unenforceable, any enforceable portion thereof, and the remaining provisions of this Development Agreement, shall continue in full force and effect.

#### **8.12 Time is of the Essence**

Time is expressly made of the essence with respect to the performance of each and every obligation hereunder.

#### **8.13 Cumulative Rights**

The warranties, assurances, covenants and remedies provided for in this Development Agreement are not the exclusive rights and remedies of the Parties but will be in addition to any other rights and remedies available under this Development Agreement, under any other instrument, at law, in equity, or otherwise, and such rights and remedies may be exercised singularly or concurrently.

#### **8.14 Governing Law and Venue**

The laws of the State of Utah shall govern this Development Agreement and the transactions contemplated by this Development Agreement, without giving effect to the choice of law rules thereof. The Parties agree that any judicial action associated with this Development Agreement shall be taken in the St. George District Court of the Fifth Judicial District of the State of Utah.

#### **8.15 Notices**

All notices and other communications required or permitted under this Development Agreement must be in writing and will be deemed delivered (i) when delivered in person to the Party, (ii) when sent by facsimile with delivery confirmed, provided that delivery is confirmed during Party's regular business hours, or if delivered after Party's regular business hours on the next regular business day, (iii) when receipt is acknowledged, if sent by e-mail, provided that receipt is acknowledged during Party's regular business hours, or if delivered after Party's regular business hours on the next regular business day or (iv) upon delivery confirmation if sent by a recognized commercial express courier. All communications must be sent to the receiving Party at the address set forth below or to such address that the receiving Party may designate pursuant to this Section.



**If to WCWCD:**

Washington County Water Conservancy District  
Attention: Brie Thompson, Associate General Manager  
533 East Waterworks Drive  
St. George, Utah 84770  
Email: brie@wcwcd.gov

**If to Developer:**

RE Developers LLC  
Solara Communities LLC  
Attention: Doug Towler  
25 W Telegraph Road APT 26  
Washington, Utah 84780  
Email: Dougtowler@redevelopersllc.com

**8.16 Assignment and Subcontracting**

Subject to the written approval of WCWCD, which approval shall not be unreasonably withheld, the Developer may assign its rights and delegate its duties hereunder to a third party purchaser of all or a portion of the Project, subject to the terms and provisions of this Development Agreement. In the event of an assignment, the assignee shall be jointly and severally liable with the Developer for the performance of each and every obligation of the Developer contained in this Development Agreement, unless, prior to the assignment, an agreement satisfactory to WCWCD delineating and allocating between the Developer and the assignee the various rights and obligations of the Developer hereunder has been approved by WCWCD. Prior to any assignment, the Developer shall obtain and deliver to WCWCD a written statement executed by the assignee, duly acknowledged by a notary public, wherein the assignee acknowledges that it has reviewed and is familiar with the terms and provisions of this Development Agreement, and agrees to be bound hereby.

**8.17 No Relationship**

Nothing in this Development Agreement creates or is intended to create any partnership, joint venture, or fiduciary relationship between the Parties. Developer shall not be an agent or employee of WCWCD for any purpose and shall not hold itself out as such. WCWCD will not be responsible for or have control or charge over any of the acts or omissions of Developer or its Representatives.

**8.18 Amendment**

This Development Agreement may only be amended, modified or supplemented by a written agreement signed by WCWCD and Developer.

### **8.19 Interpretation**

(a) The Parties hereto acknowledge and agree that: (i) each Party has had a full and fair opportunity to have counsel review and to negotiate the terms of this Development Agreement; and (ii) the terms and provisions of the Development Agreement shall be construed fairly to all Parties hereto and not in a favor of or against any Party, regardless of which Party was generally responsible for the preparation of this Development Agreement.

(b) The division of this Development Agreement into Articles, Sections and Exhibits and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Development Agreement. The expressions "hereof", "herein", "hereto", "hereunder", "hereby" and similar expressions without further specification refer to this Development Agreement and not to any particular Article, Section or other portion of this Development Agreement.

### **8.20 Counterparts**

This Development Agreement may be signed in counterparts, each of which will be deemed an original and all of which taken together will constitute one and the same instrument. The Parties intend that fax or emailed .pdf signatures constitute original signatures and that a faxed or emailed agreement containing the signatures (original, .pdf, or faxed) of all the Parties is binding on the Parties.

IN WITNESS WHEREOF, the Parties have executed this Development Agreement to be effective as of the Effective Date.

***[SIGNATURES ON THE FOLLOWING PAGES]***

GRAPEVINE DEVELOPMENT,  
LLC

By: Paul Morris  
Name: Paul Morris  
Title: Manager

STATE OF UTAH )  
 : ss.  
COUNTY OF Washington )

On this 21 day of July 2025, personally appeared before me Paul Morris  
\_\_\_\_\_, as Owner/Developer \_\_\_\_\_ of Grapevine  
Development, LLC, whose identity was proved on the basis of satisfactory evidence, and said  
document was signed by him.

Witness my hand and official seal.



Ali Taylor  
NOTARY PUBLIC  
Residing at: \_\_\_\_\_

My Commission Expires:  
3-30-2027



724. 3. 1. 1. 1. 1.

21. 1. 1. 1. 1. 1.  
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21. 1. 1. 1. 1. 1.

GRAPEVINE WASH  
LOCAL DISTRICT


By:   
Name: Paul Morris  
Title: Chair

STATE OF UTAH )  
COUNTY OF Washington : ss.

On this 21 day of July 2025, personally appeared before me Paul Morris, as Chair of Grapevine Wash Local District, whose identity was proved on the basis of satisfactory evidence, and said document was signed by him.

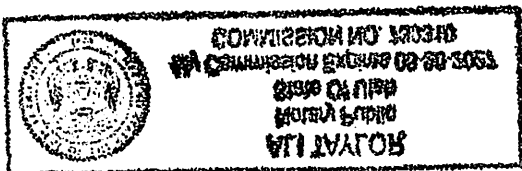
Witness my hand and official seal.



  
NOTARY PUBLIC  
Residing at: \_\_\_\_\_

My Commission Expires:

3-30-2027



WCWCD,  
Washington County Water  
Conservancy District, a political  
subdivision of the State of Utah

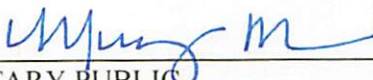
By:   
Name: Zach Renstrom  
Title: General Manager

STATE OF UTAH                    )  
  : ss.  
COUNTY OF Washington )

On this 15 day of August 2025, personally appeared before me Zach Renstrom,  
as General Manager of Washington County Water Conservancy District, whose identity was  
proved on the basis of satisfactory evidence, and said document was signed by him.

Witness my hand and official seal.



  
NOTARY PUBLIC  
Residing at: St. George, Utah

My Commission Expires:

July 18, 2027



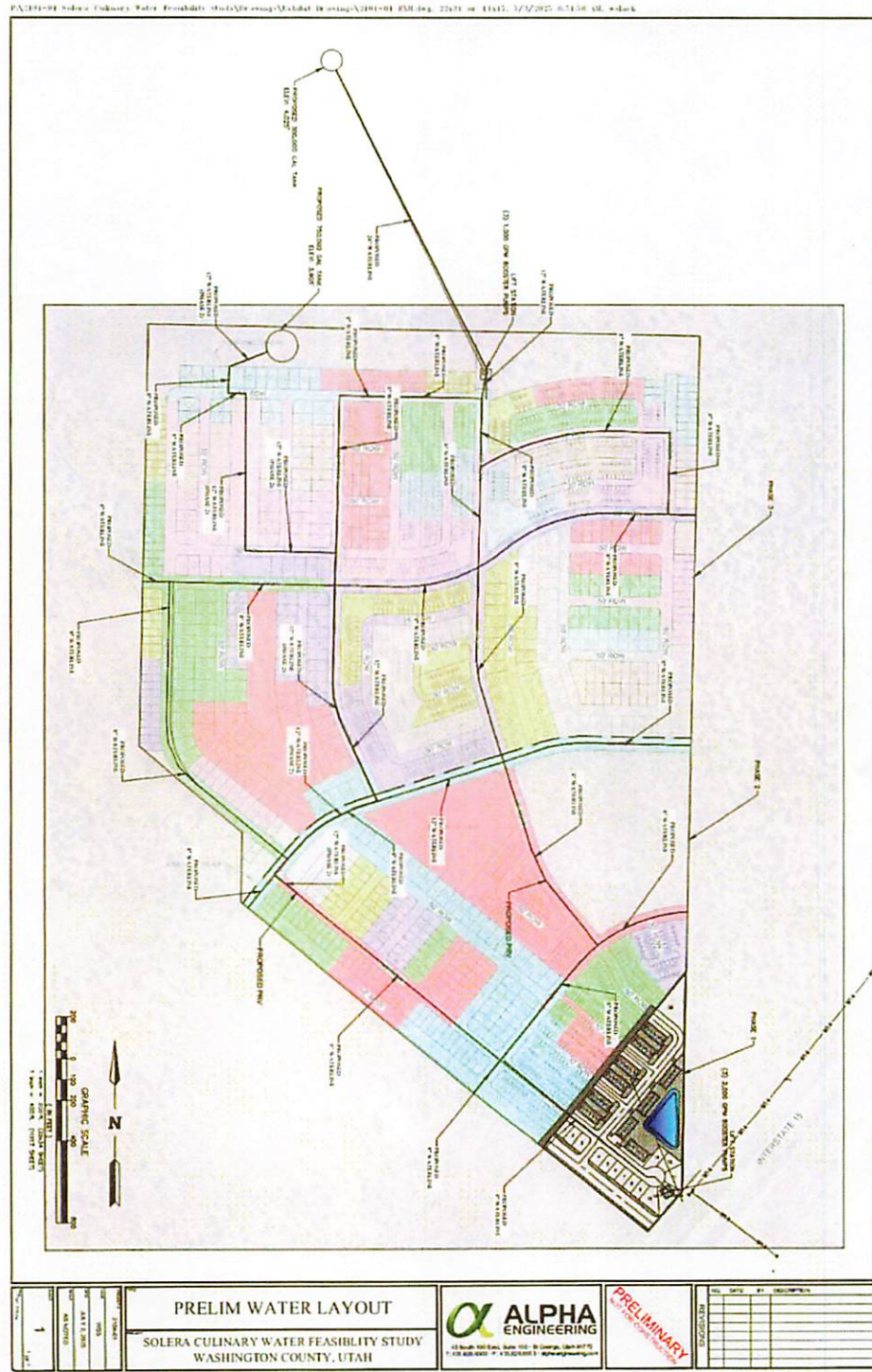
**Exhibit A**  
**[Description of Property]**

S: 32 T: 40S R: 13W BEGINNING AT A POINT ON THE NORTH QUARTER CORNER OF SECTION 32, TOWNSHIP 40 SOUTH, RANGE 13 WEST, SALT LAKE BASE AND MERIDIAN; RUNNING THENCE S88°44'28"E ALONG THE NORTH SECTION LINE OF SAID SECTION 32, 2638.74 FEET TO THE NORTHEAST CORNER OF SAID SECTION 32; THENCE ALONG THE EAST SECTION LINE OF SAID SECTION 32 THE FOLLOWING THREE (3) COURSES: THENCE S01°19'03"W 2634.83 FEET TO THE EAST QUARTER CORNER OF SAID SECTION 32; THENCE S00°56'02"W 1322.72 FEET TO THE SOUTH 1/16TH CORNER OF SECTIONS 32, 33, THENCE S0°55'52"W 134.49 FEET; THENCE DEPARTING SAID SECTION LINE AND RUNNING SOUTHWESTERLY ALONG THE ARC OF A NON-TANGENT CURVE TO THE RIGHT, HAVING A RADIUS OF 16949.80 FEET AND A RADIAL BEARING OF N50°09'12"W, A DISTANCE OF 251.34 FEET, THROUGH A CENTRAL ANGLE OF 00°50'59" (LONG CHORD BEARS: S40°16'17"W 251.34 FEET); THENCE N50°47'28"W 2513.73 FEET; THENCE N01°01'55"E 335.62 FEET; THENCE N50°04'49"W 642.15 FEET TO A POINT ON THE NORTH-SOUTH QUARTER SECTION LINE OF SAID SECTION 32; THENCE N01°13'34"E ALONG SAID SECTION LINE, 2004.66 FEET TO THE POINT OF BEGINNING.

Containing 8,715,049.2 square feet or 200.07 Acres

**Development and Service Agreement**  
**Solara Subdivision**  
**Exhibit A**

# **Exhibit B** **[Preliminary Water Layout Dated July 2, 2025]**



Development and Service Agreement  
 Solara Subdivision  
 Exhibit B



# Board of Trustees Meeting

August 4, 2025

# Agenda

- Water supply update
- Presentation on pool analysis
- Update on Water Efficient Landscape Program and consideration of a resolution to modify program requirements
- Consider approval of contract for Surveying and Mapping Service for the Regional Reuse Purification System
- Consider approval of Interlocal Agreement Between the City of St. George and the Washington County Water Conservancy District Regarding the Graveyard Wash Reservoir and the Sand Hollow Mitigation Area
- Consider approval of Development & Water Services Agreement with Solara Communities
- Consider approval of Bid for Kolob Creek Dam Spillway Repair
- Manager's report
- Consider approval of July 7, 2025 & July 28, 2025, board meeting minutes



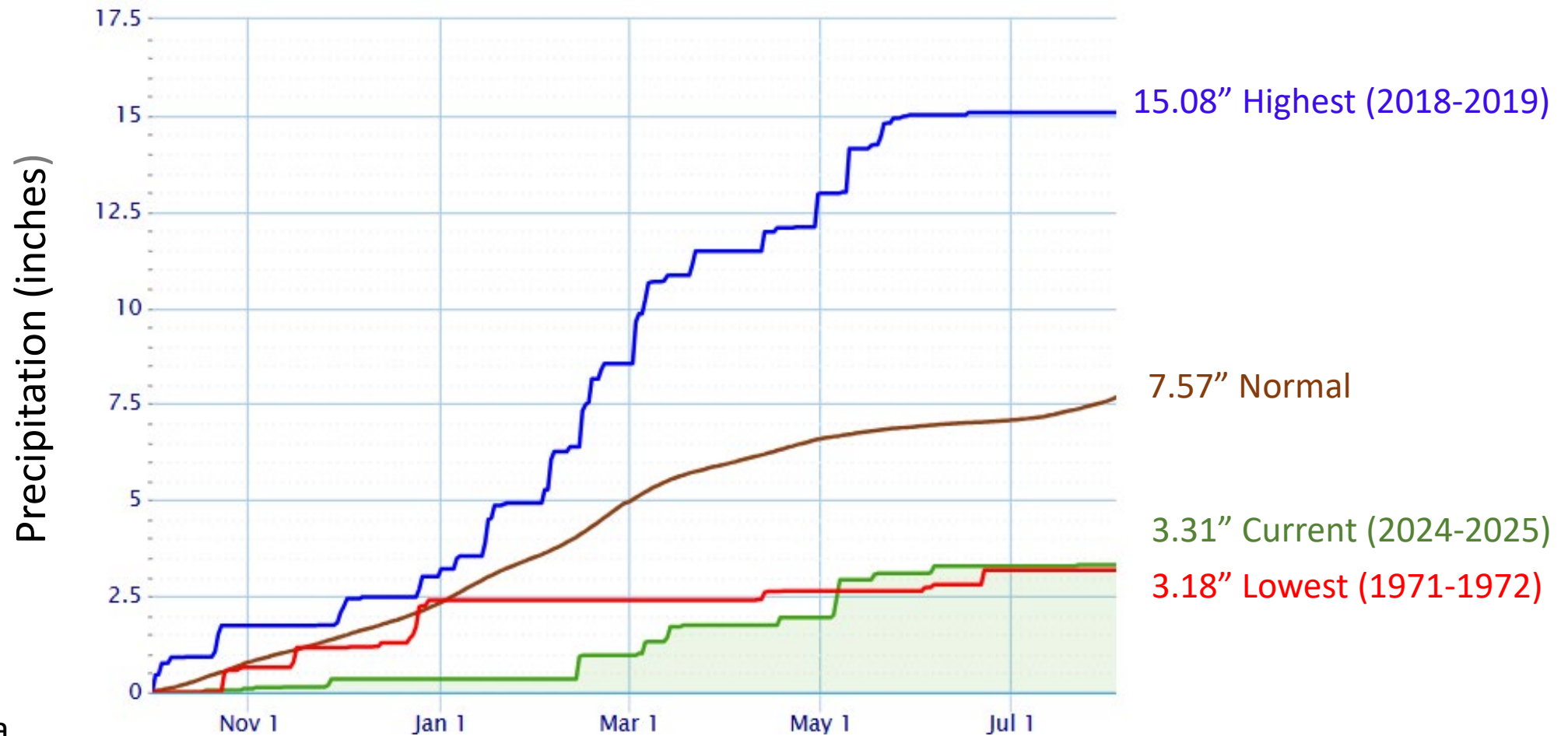


# 1. Water supply update

- Brie Thompson, WCWCD, Associate General Manager
- For Information



# Cumulative Precipitation – St. George



NOAA NOWdata

Powered by ACIS at [weather.gov](https://weather.gov)



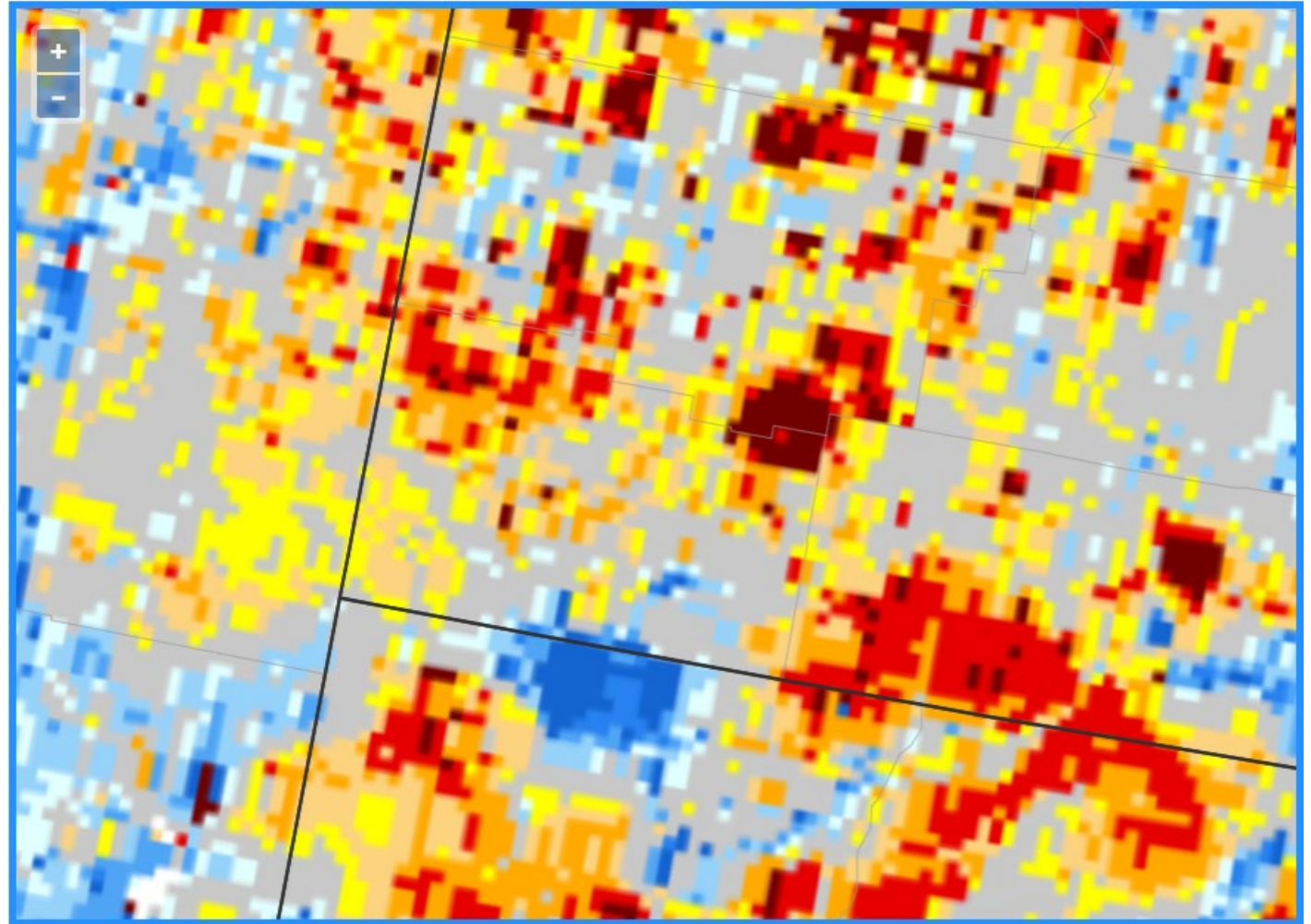
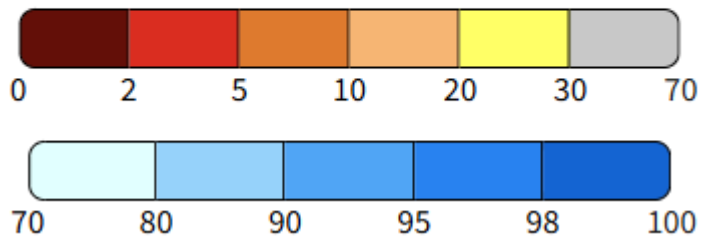
# Soil Moisture

Red and orange hues indicate drier soils.

Blues indicate greater soil moisture.

## Legend

### 0-100 cm Soil Moisture Percentile

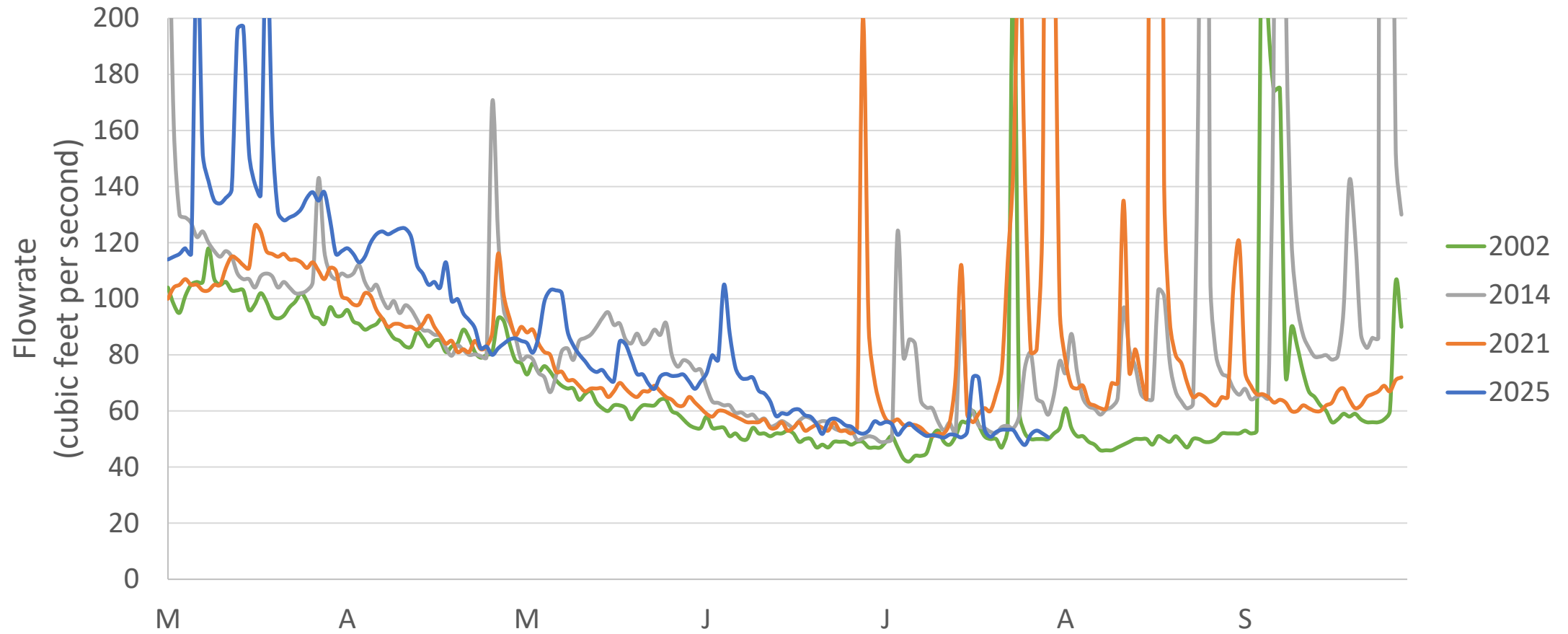


Source(s): NASA  
Data Valid: 08/03/25

**Drought.gov**



# Virgin River at Virgin Low Runoff Years



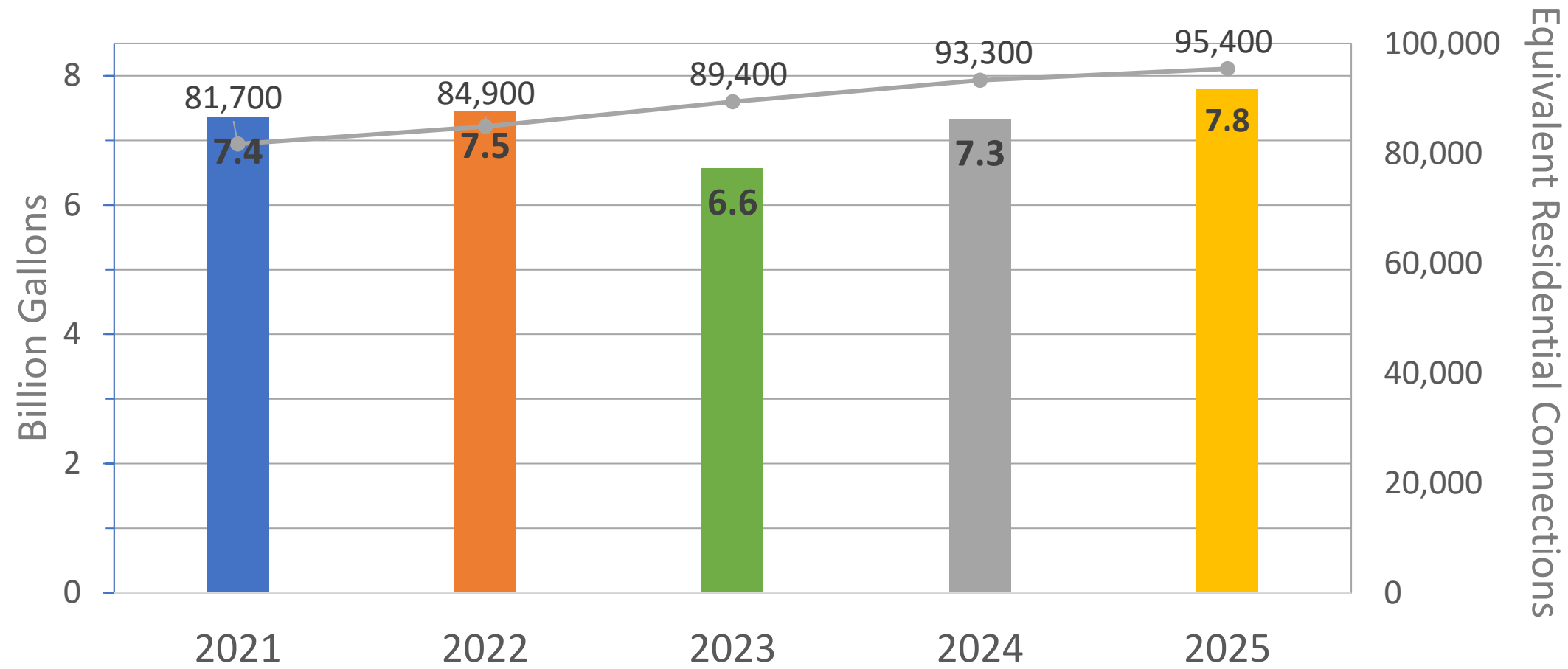
USGS gage 09406000 at [waterdata.usgs.gov](https://waterdata.usgs.gov)







# Regional Potable Water Production



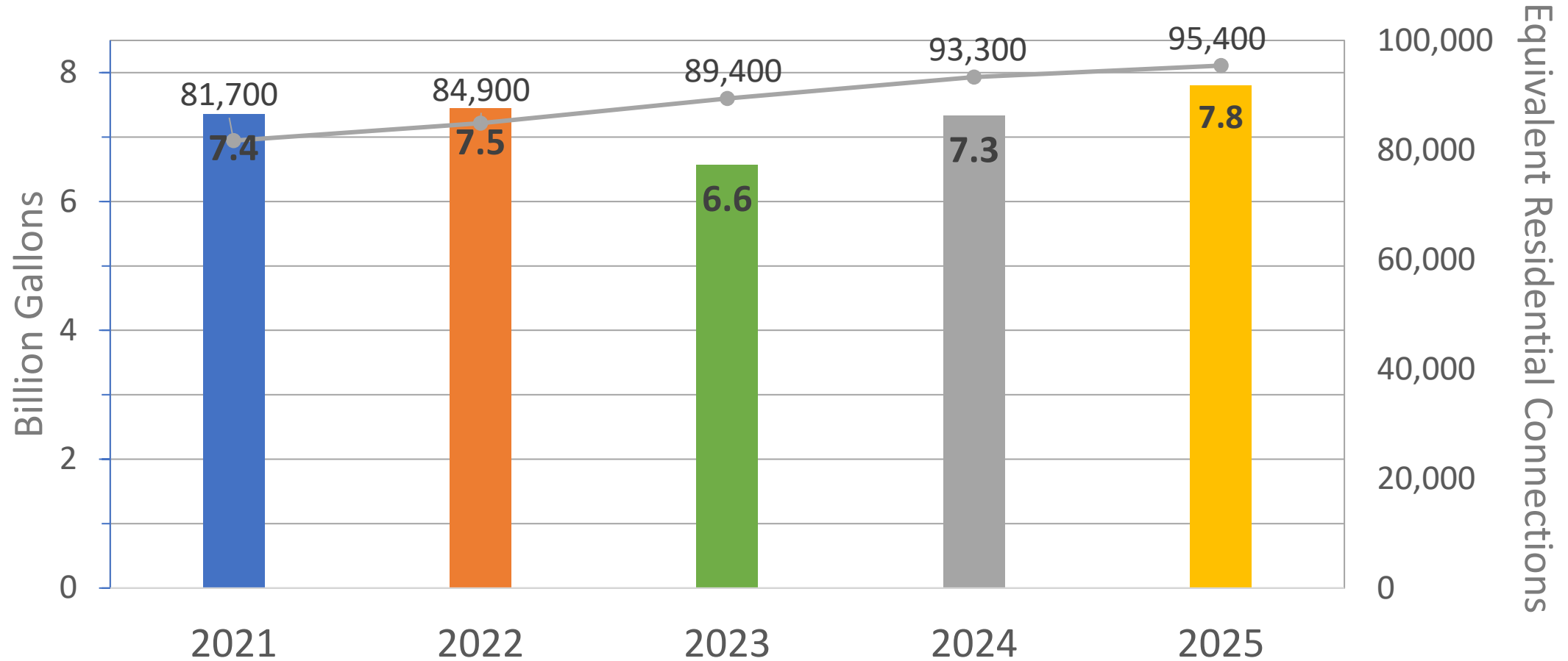
Year to date production of district and municipal partners January through June





# Regional Potable Water Production

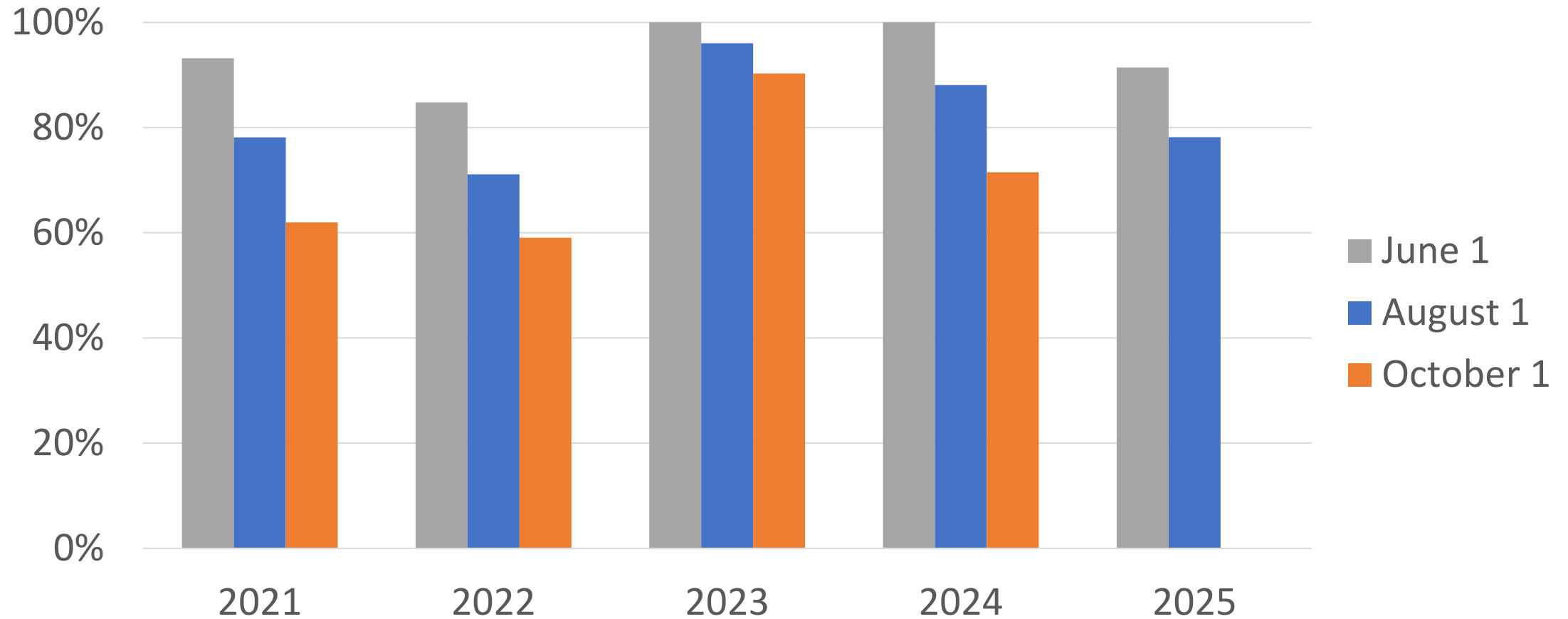
9% decrease  
in use per ERC  
comparing  
2025 to 2021



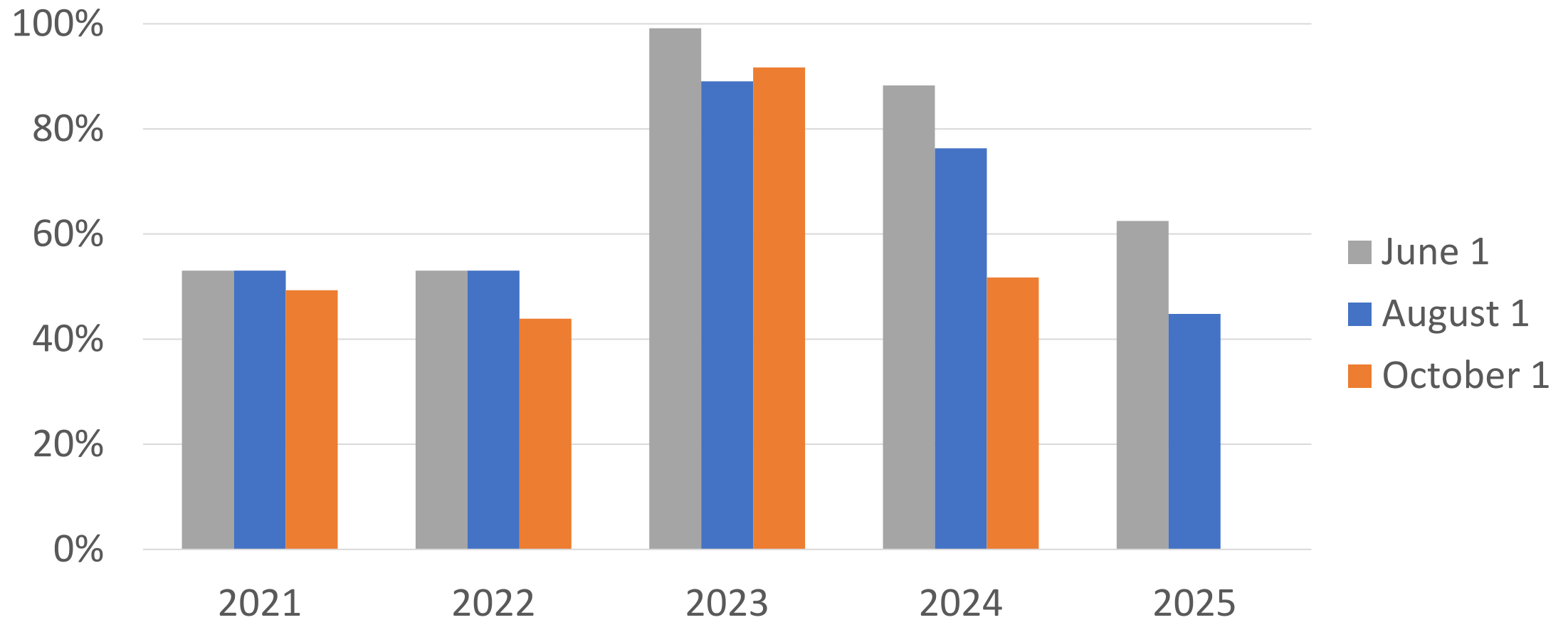
Year to date production of district and municipal partners January through June



# Sand Hollow & Quail Creek Reservoirs



# Gunlock Reservoir





# Item 1 - Summary

- Conditions continue to be dry
- Water usage per connection is lower than in previous dry years
- Reservoir storage is key to providing a reliable supply

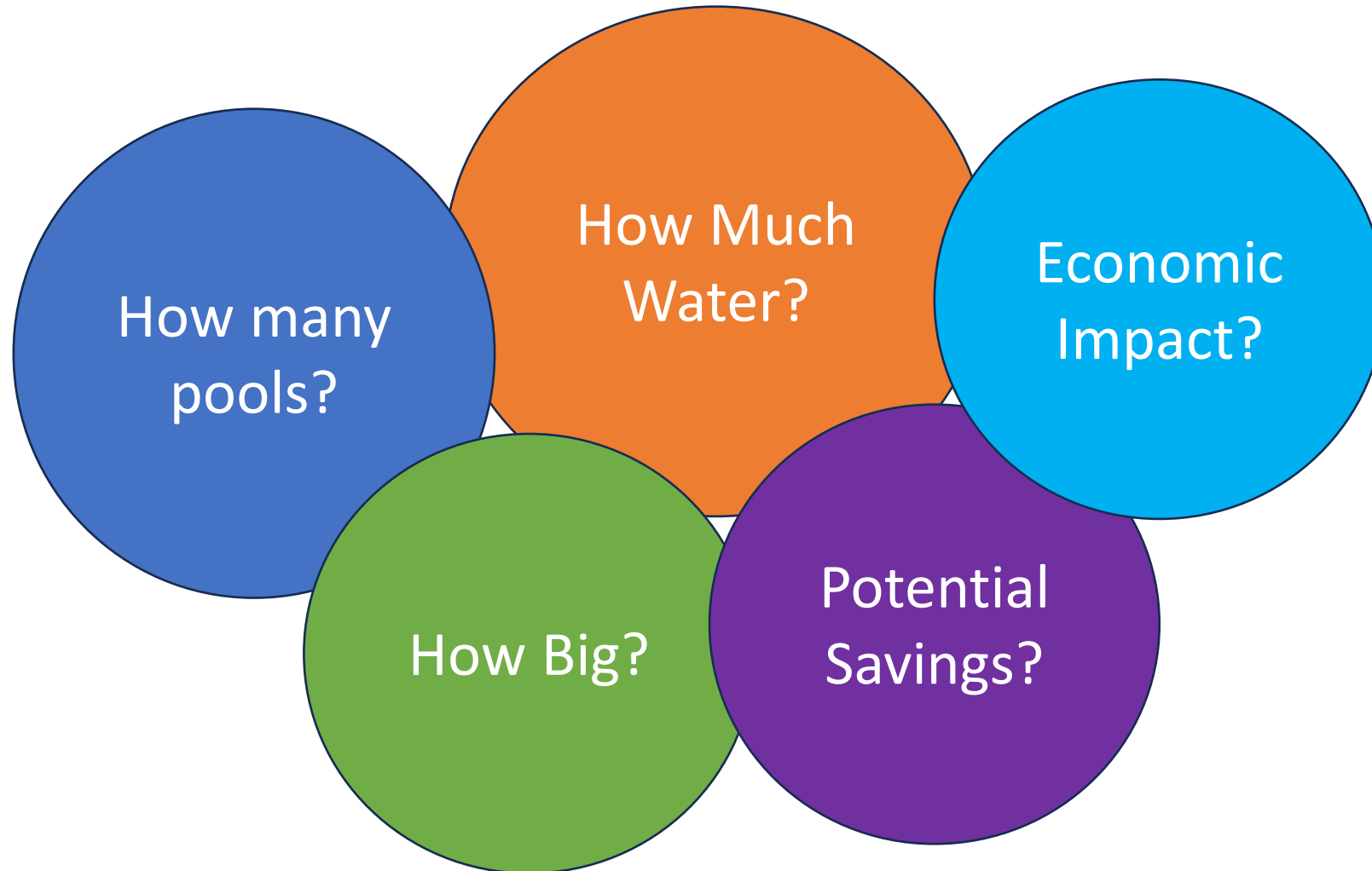


## 2. Presentation on pool analysis

- Doug Bennett, WCWCD, Conservation Manager
- For information



# Pool Study Objectives



# Residential Pools

As of June 2025, the Washington County Assessor's database showed 9,057 swimming pools in Washington County.

• St. George	4,068	(51%)
• Washington	2,028	(22%)
• Hurricane	904	(10%)
• Ivins	697	(8%)
• Santa Clara	412	(5%)
• Toquerville	75	(1%)
• La Verkin	52	(1%)
• Other	181	(2%)





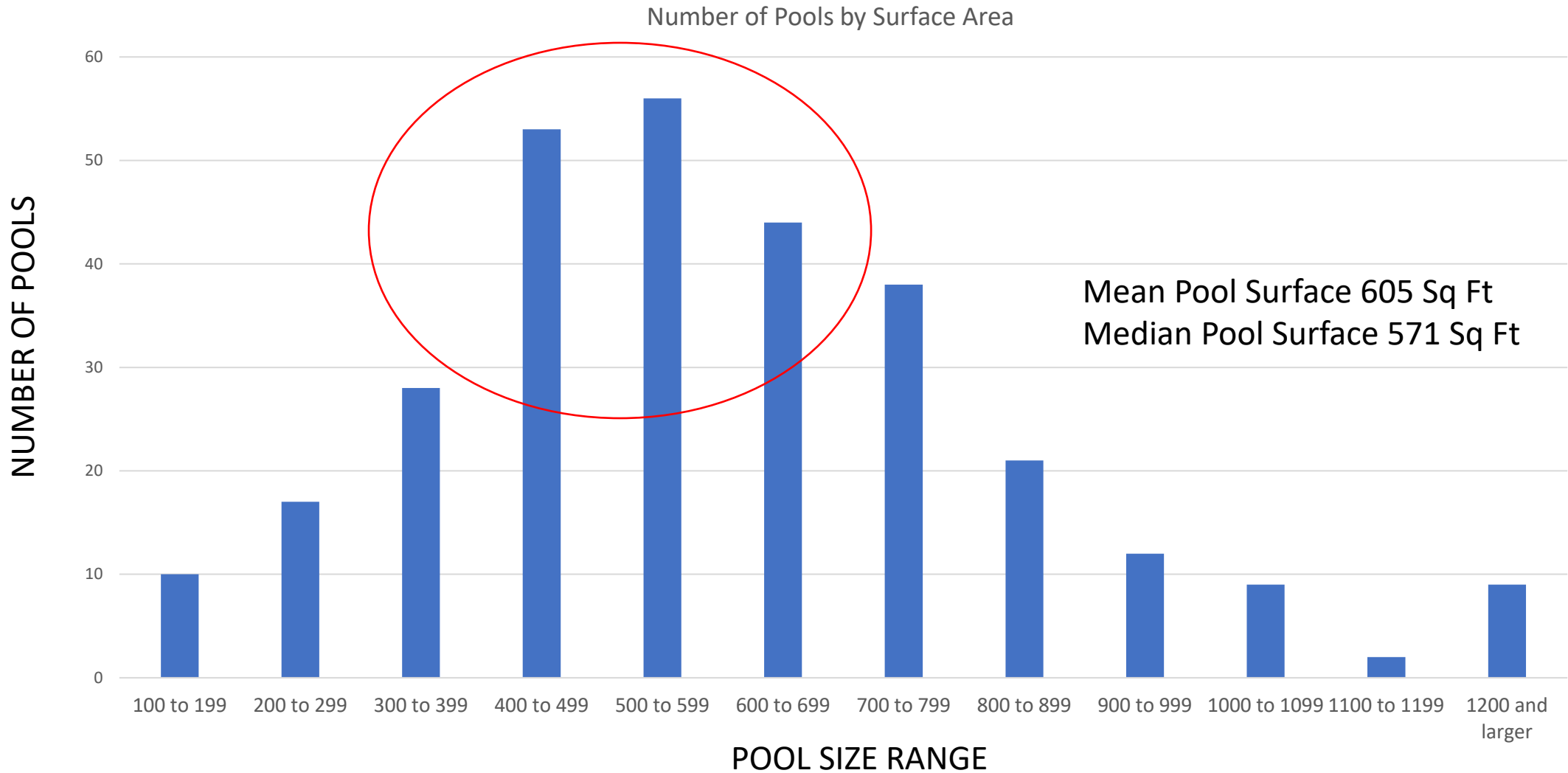
# Methodology

- Permit data
- Aerial measurement
- Economic value

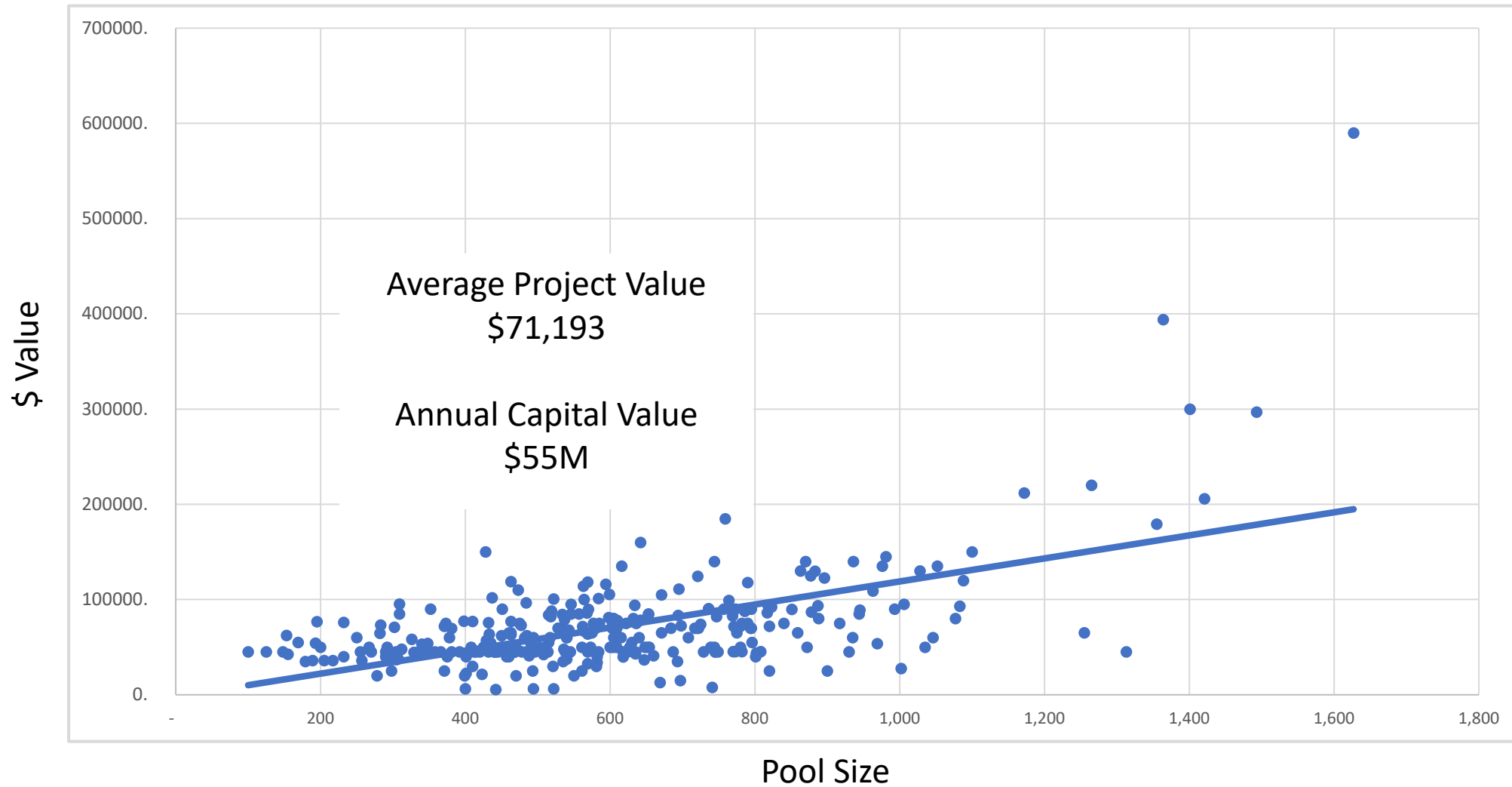
permit reports			
Issue Date			
date	Permit #	Permit type	description
12/27/23			
12/18/23	23-0325		
12/12/23	23-0318	Pool	Gunite Pool
11/07/23	23-0315	Pool	Residential Pool
07/31/23	23-0295	Pool	gunite pool
07/12/23	23-0218 (C)	Pool	installation of 15x32" fiberglass pool
07/10/23	23-0192	Pool	installation of a concrete lap pool and hot tub
07/10/23	23-0191	Pool	Pool Install-16x40 fiberglass poo
07/03/23	23-0190	Pool	Pool & Spa Installation
06/02/23	23-0180	Pool	Pool size is 35'x18' with an 6'x5' spa outside of the pool and with cover
05/23/23	23-0154 (C)	Retaining Wall	CMU Stucco Block Wall Retention to support the pool construction
05/23/23	23-0142	Pool	Pool Installation
05/19/23	23-0140 (C)	Pool	Pool Installation
04/21/23	23-0106 (C)	Pool	Pool Installation
04/18/23	23-0104 (C)	Single Family	Single family home with pool
03/15/23	23-0078 (C)	Pool	residential pool
03/15/23	23-0075	Pool	Gunite Pool
02/16/23	23-0048 (C)	Pool	residential pool
11/16/22	22-0367	Pool	Install fiberglass pool shell with automatic cover,
11/04/22	22-0345 (C)	Pool	We will be installing a pool in the Merrill's backyard.
10/31/22	22-0338 (C)	Pool	Build Approx. 10x7 bath pool house in the NorthWest corner of property.
Accessory Building			
Subtotal:			
American Heritage Pools			
Diamond Reef Pools			
Kamea Pools			
Blue Lark Construction			
Shonto Point			
Citadel			
MOJAVE MESA			
ALTURA			
ALTURA			
S. 435 West Circle			
74 W Terrasimab Way			
832 W Two Moons Way Keyenda			
289 N. Painted Hills Drive			
463 W Saguaro Way			
154 N. 6th			
I-CRCA-4			
I-CIE-1			
I-TAV-12-F-349			
I-CTD-2-11			
I-MOM-1			



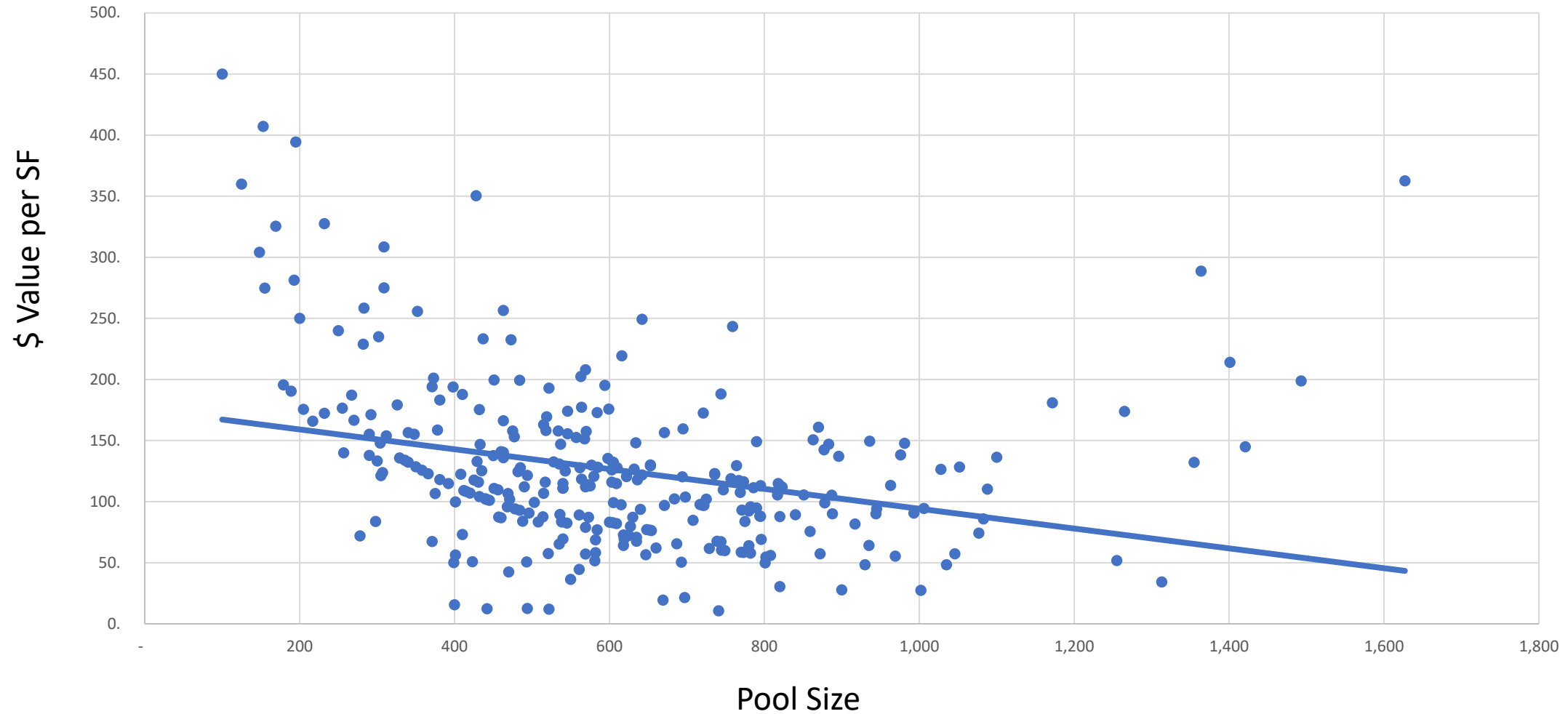
# Pool Surface Area Distribution



# Pool Valuation by Surface Area

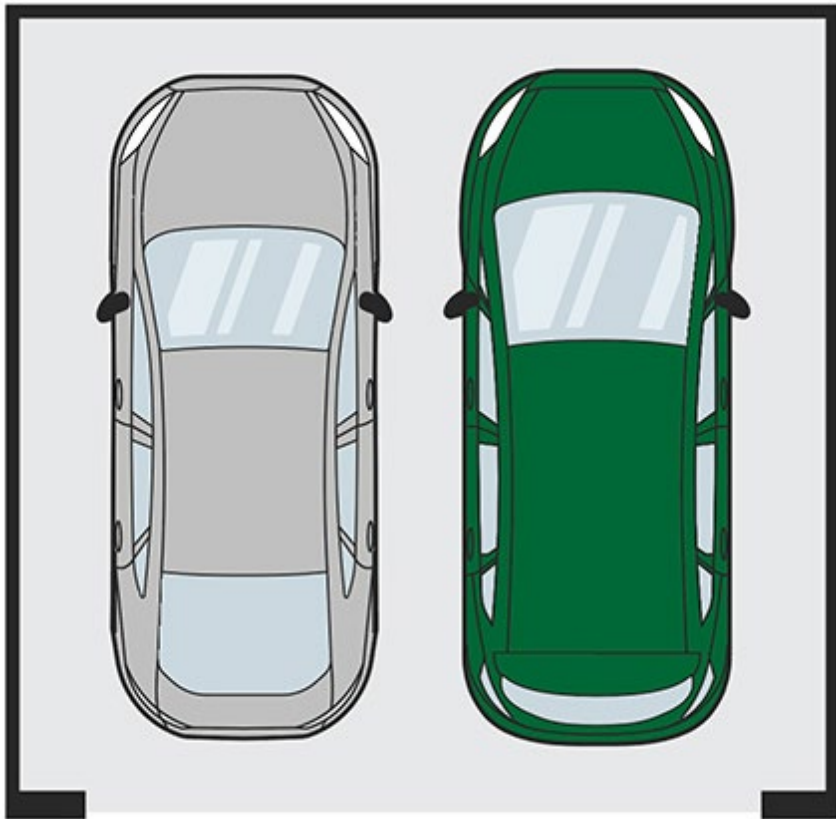


# Pool Valuation per Square Foot





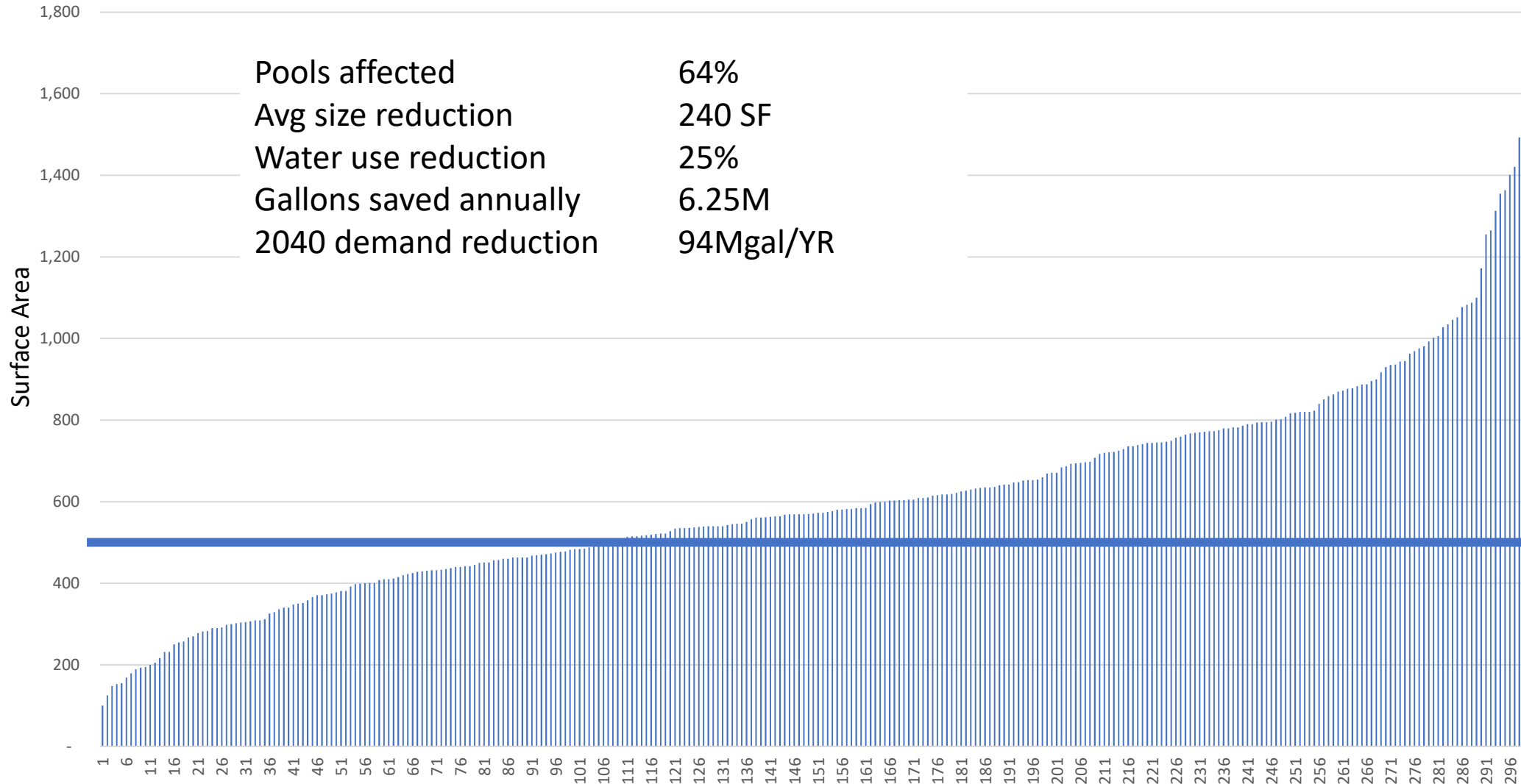
Standard two-car garage  
20' X 20'



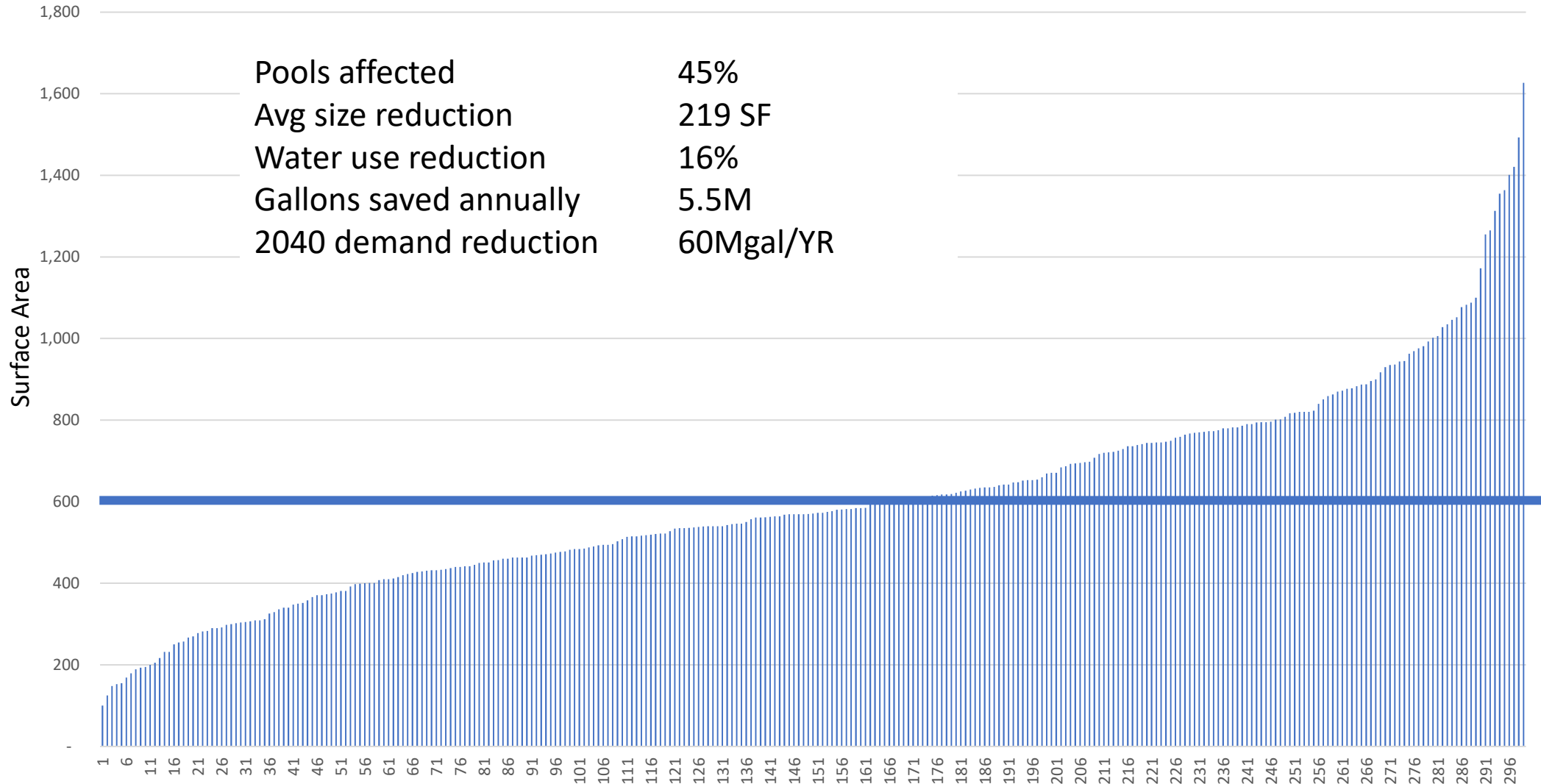
400 SF 22,000 gals/Yr	500 SF 28,000 gals/Yr	600 SF 33,000 gals/Yr	700 SF 39,000 gals/Yr
-----------------------------	-----------------------------	-----------------------------	-----------------------------

Evaporation loss only. Does not include leaks or drain/refill

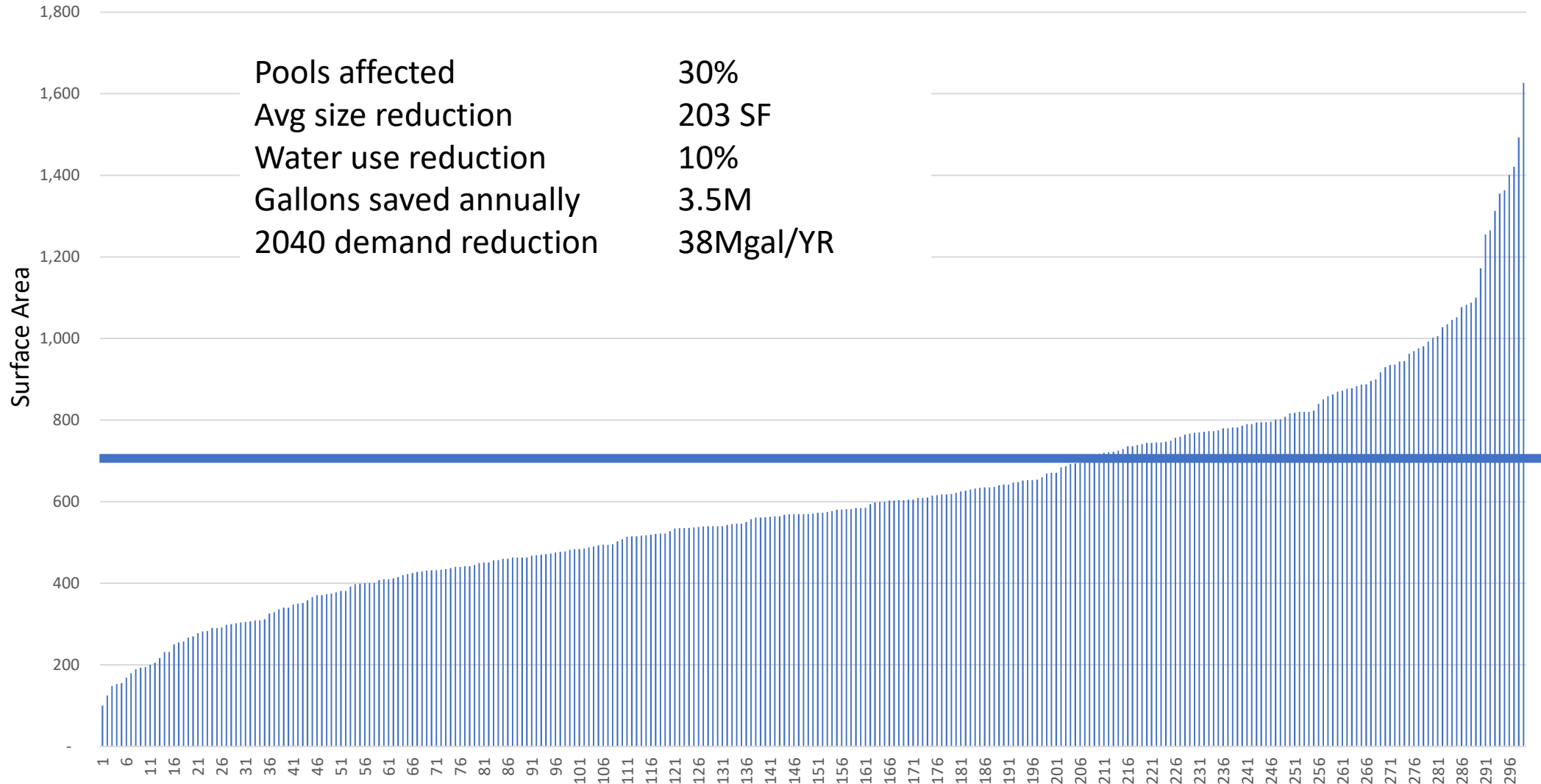
# 500 Square Foot Limit



# 600 Square Foot Limit



# 700 Square Foot Limit





# Findings – Water Use

- Existing residential pools are estimated to consume 250-300 million gallons annually
  - 1.6 percent of all water supplied
  - 921 AF
  - 1,560 ERC at 0.59 AF
- The average pool's consumptive use is about 30,000 gallons each year
- Every year, new residential pools increase regional water demand by 25 million gallons in perpetuity (77 af)



# Findings – Trends

- The number of residential pools is increasing at double the rate of our population growth (8.5% growth per year)
- The percentage of pools over 800 square feet is increasing
- Secondary and primary homes install pools at equivalent rates



# Findings – Economics

- Pool construction comprises one-half of one percent of the region's GDP
- 600-square foot maximum may reduce construction spending by 11 percent (\$6M)
- A modest, well-maintained pool increases home value 5-7 percent, but ROI decreases as pool sizes increase
- No significant impact is anticipated to home values or tax revenue
- No significant impact is anticipated in the local aftermarket and maintenance sector
- Incentivizing mechanical pool covers could increase industry revenues



# Small Pools



200 Sq Ft  
\$944K Value

1752 S 2760 East Cir, Saint George



300 Sq Ft  
\$990K Value

2616 S 3210 E, Saint George, UT 84790



235 Sq Ft  
\$2M Value

5346 S Cyan Ln, Saint George, UT 84790





# 500 Square Foot Pools



\$1.2M Value

6283 S Desert Cove Cir, Saint George, UT 84790



\$1.45M Value

1287 W Bloomington Dr S Unit 7, Saint George, UT 84790





# 500 Square Foot Pools

\$1.2M Value



\$1.25M Value





# 600 Square Foot Pools



\$1.4M Value

4739 N Fish Rock Cir, Saint George, UT 84770



\$2.5M Value

2011 S Pinnacle Dr, St George, UT 84790





# 700 Square Foot Pools



\$1.2M Value



2639 E Poplar Ct, Saint George, UT 84790





# Item 1 – Discussion Summary

Lawns and pools have similar water use characteristics on a per square foot basis. Both are a consumptive use.

Lawns and water features are limited in scale; pools are not.

Reasonable standards protect the viability of the pool industry.

Installation of an automated cover may be a rationale to allow additional square footage.



### 3. Update on Water Efficient Landscape Program and request to modify program requirements

- Doug Bennett, WCWCD, Conservation Manager
- For action



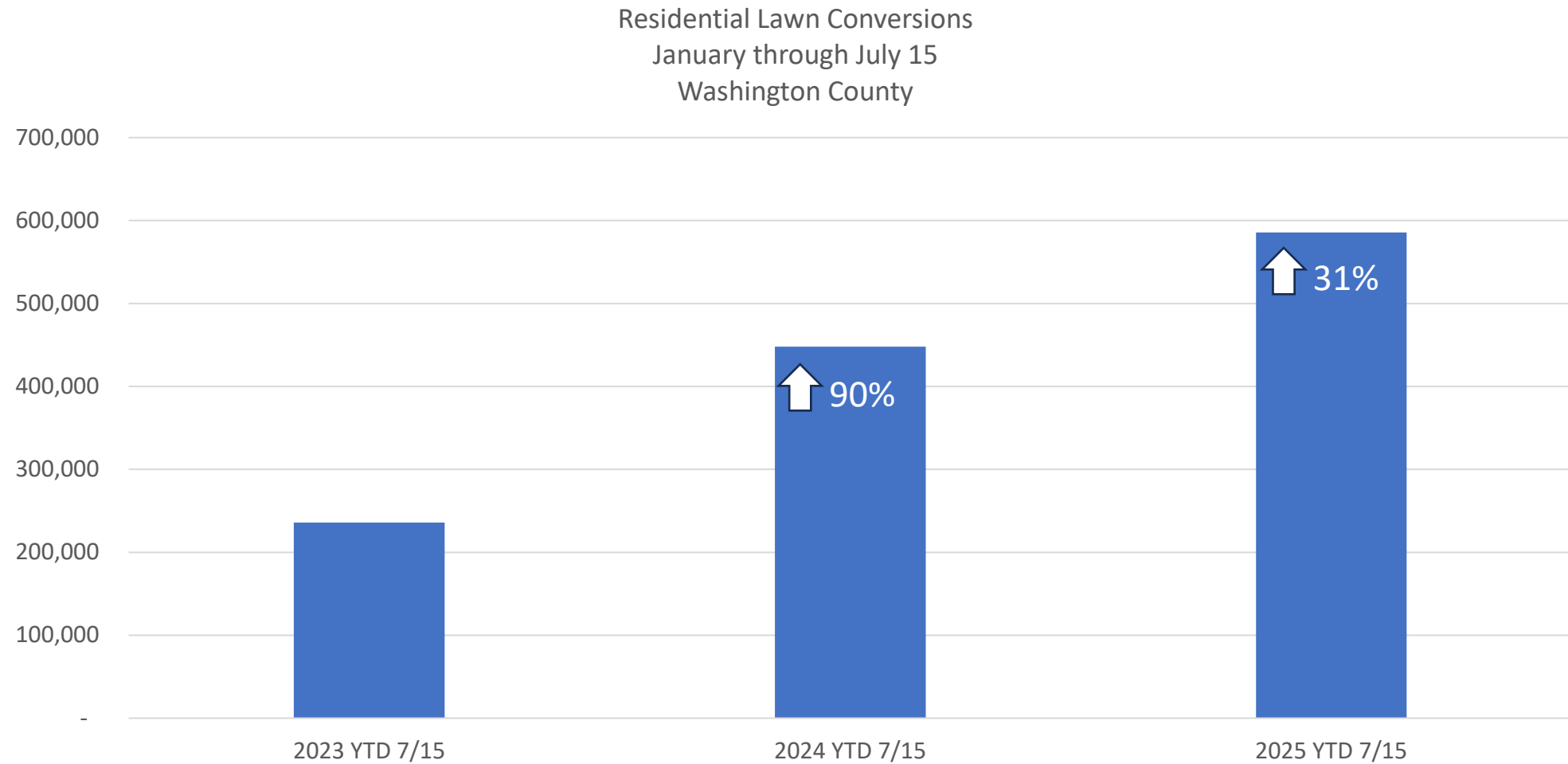
# Achievements

Since Inception

- 4,100 applicants
- 2,300 completed projects
- 2.8 M square feet converted (50 football fields)
- 120M gallons conserved annually
- \$16K per acre-foot water development cost



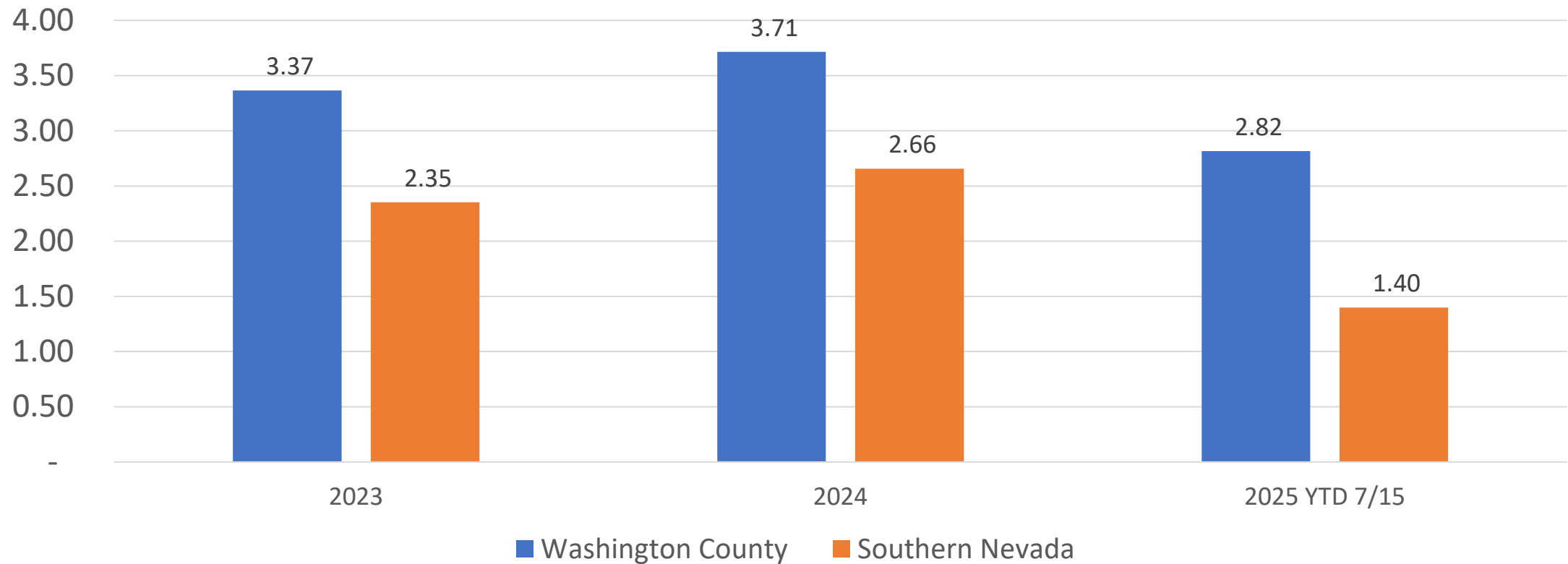
# Mid-Year Status



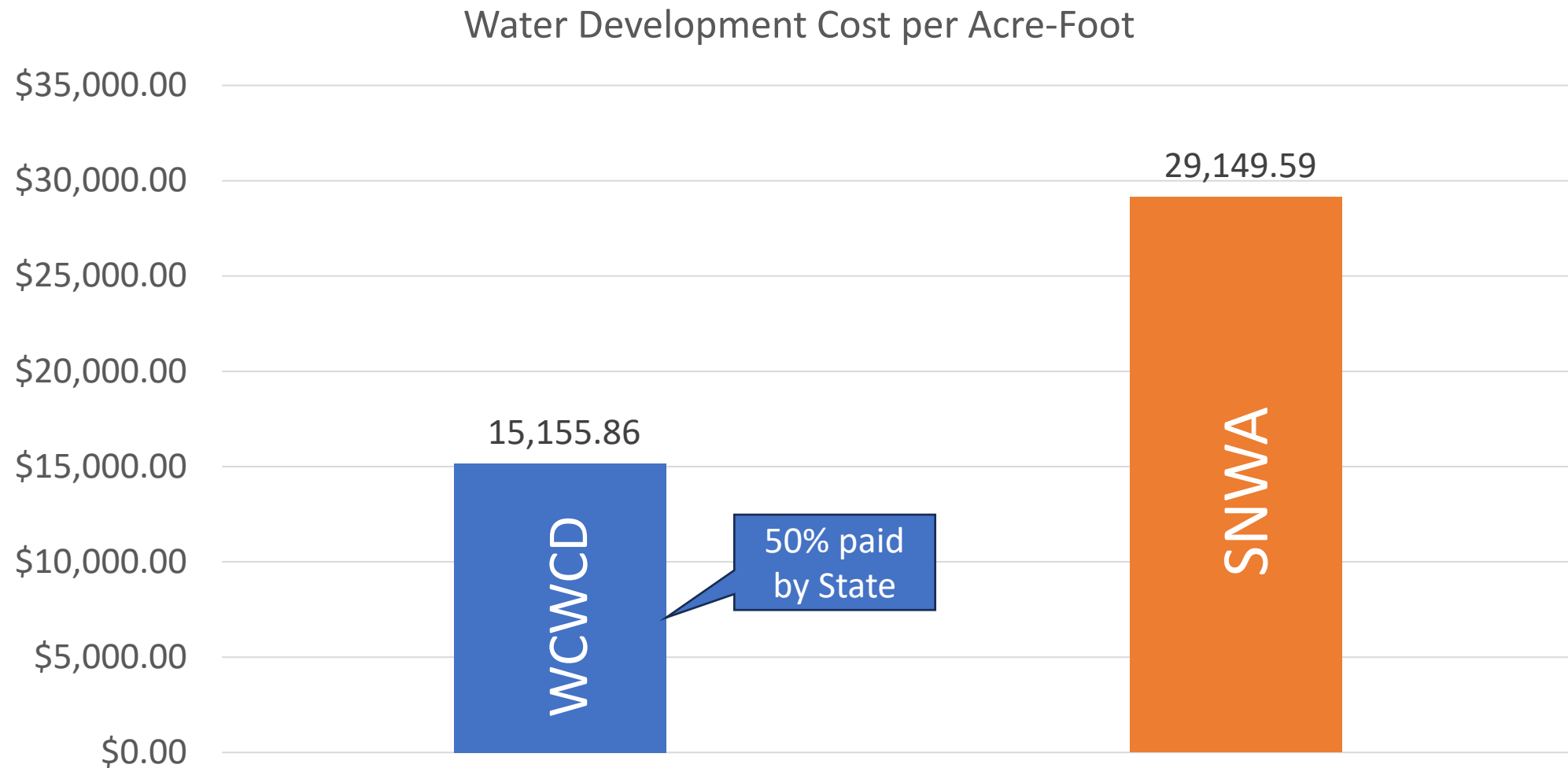


# How do we stack up?

## Homeowner Lawn Conversions Square Feet Per Capita



# Mid-Year Status



# “Piggyback” Rebates

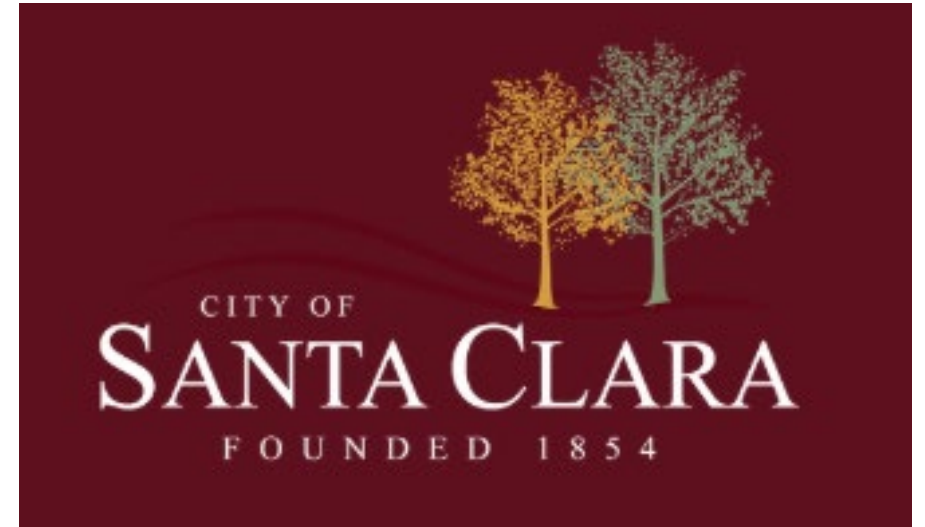
Supplemental municipal funding

- \$82,083 in Santa Clara EWUS Equity funds
- Additional \$1/SF up to \$500 per resident

Qualifies for EWUS equity program  
passed by the WCWCD board

Cost matched by the State of Utah

Effective Sep 1, pending SC City Council  
and WCWCD approval



# Large Clients

Program pays \$2/SF for first 5,000, then \$1/SF

Large commercial projects over 5,000 square feet are under-represented

\$1/SF tier does not incentivize large users

Current program average is \$1.99/SF



This 21,000 square foot commercial lawn uses 1.2M gals/Yr





## Item 3 - Recommendation

Move to approve the resolution to modify the Water Efficient Landscape Program to pay applicants \$2 per square foot for all qualifying square footage effective September 1, 2025, up to the existing program maximum, and authorize staff to develop necessary policy and/or processes to utilize supplemental funding.



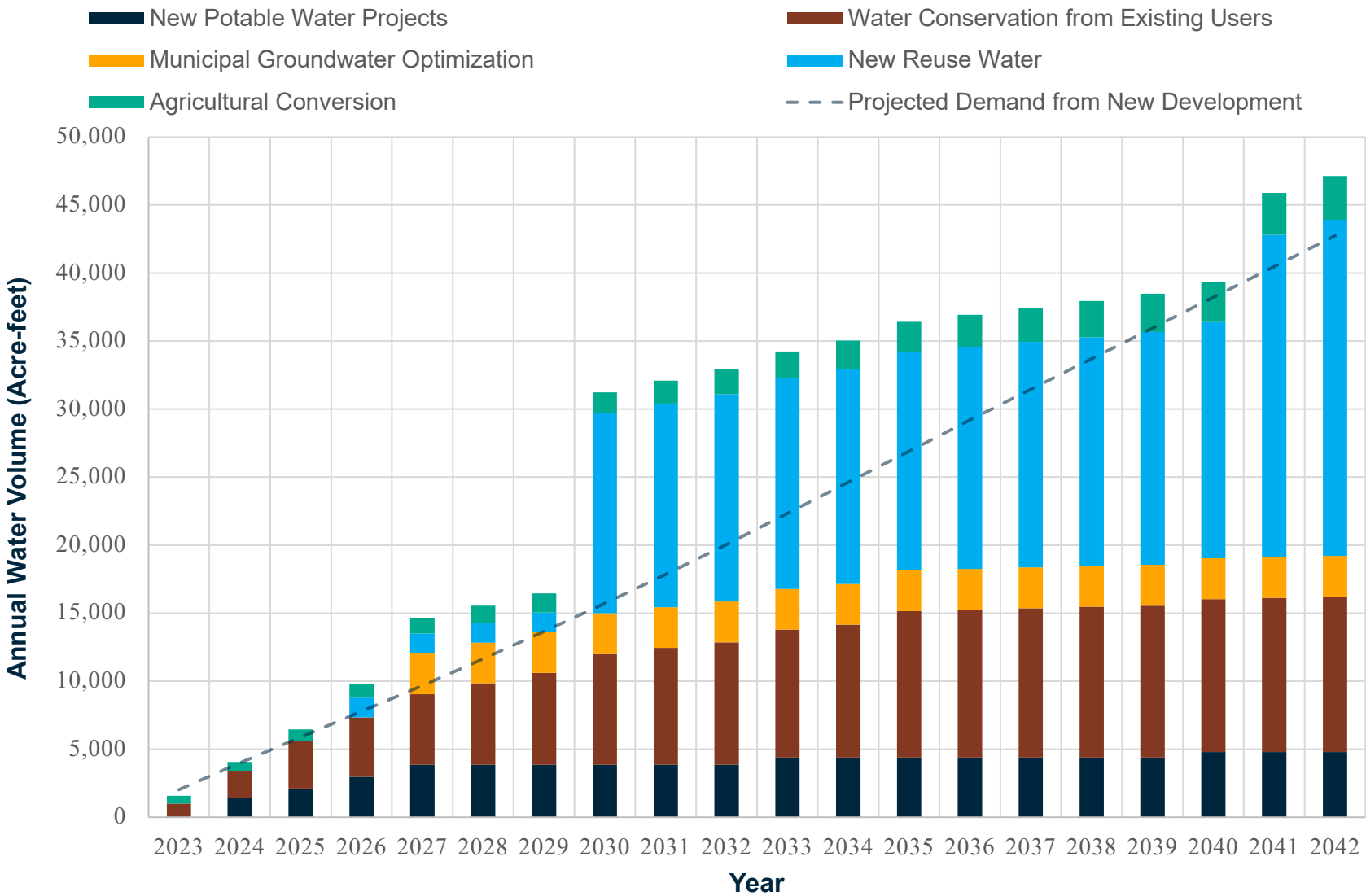
## 4. Consider approval of contract for surveying and mapping service for the Regional Reuse Purification System

- Trinity Stout, WCWCD, Reuse Project Manager
- For action



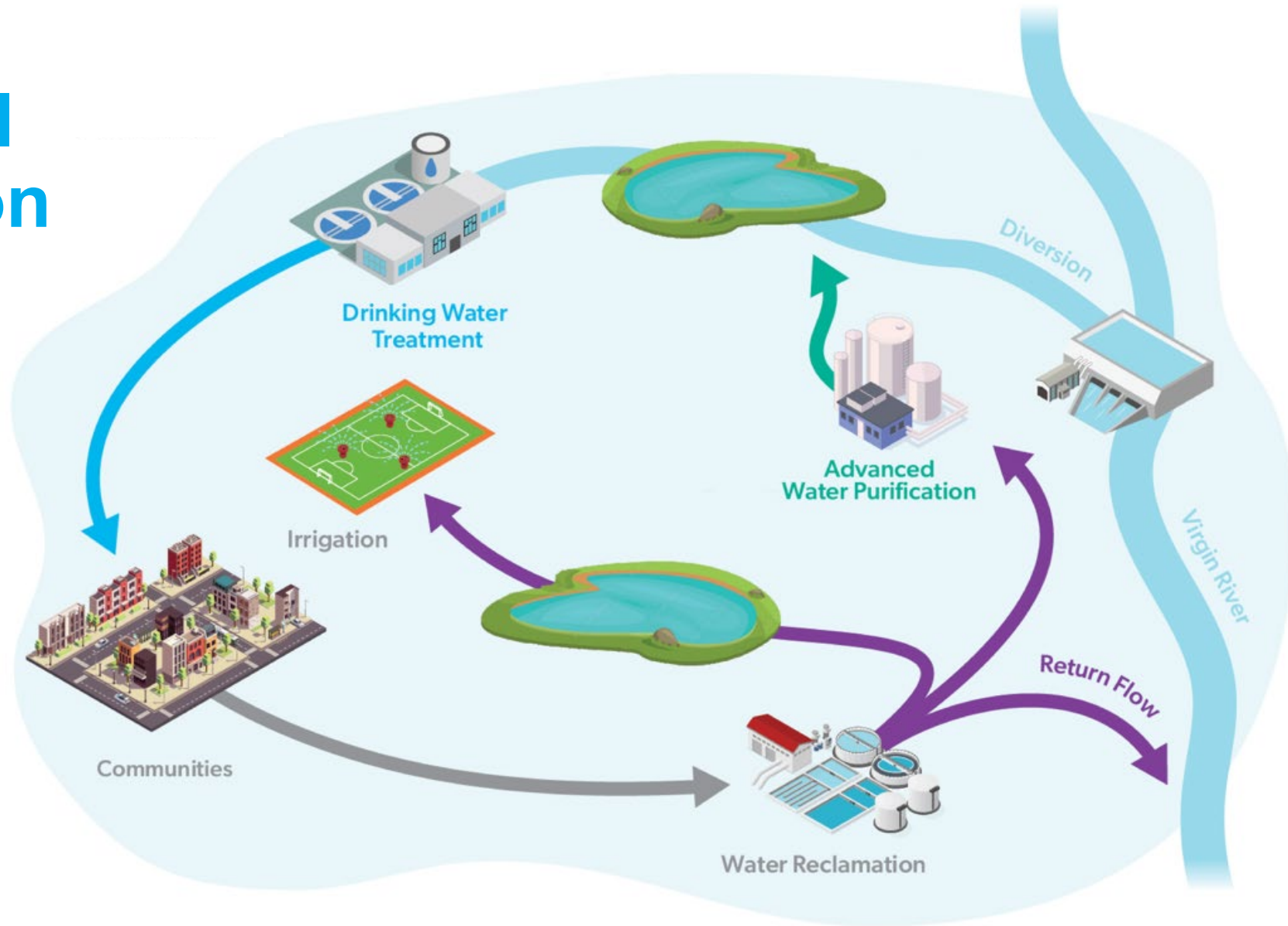


# Our Water Future



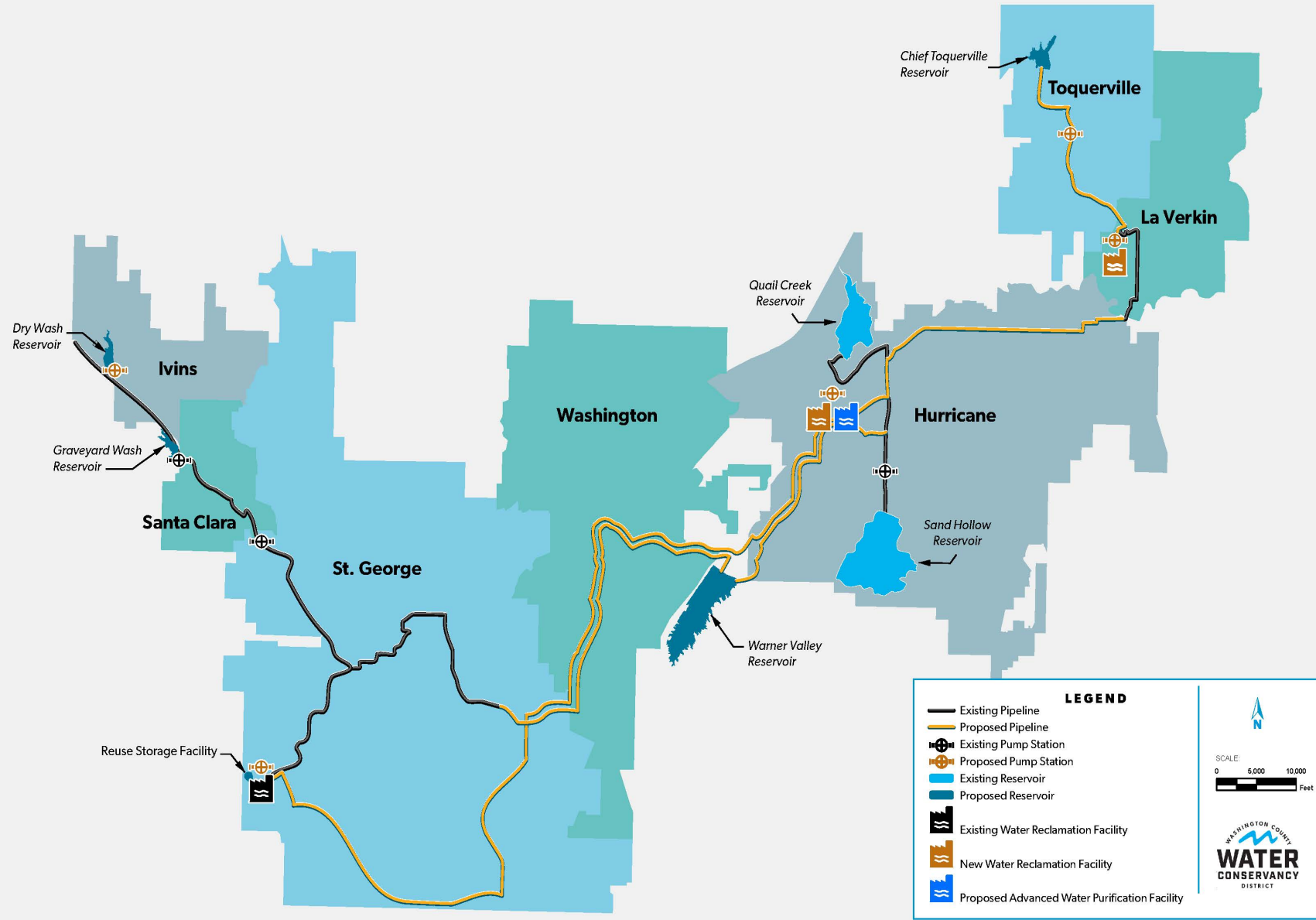
# REUSE: Regional Reuse Purification System

Projected to produce 24,000 acre-feet of water per year by 2042 — enough to serve more than 40,000 homes

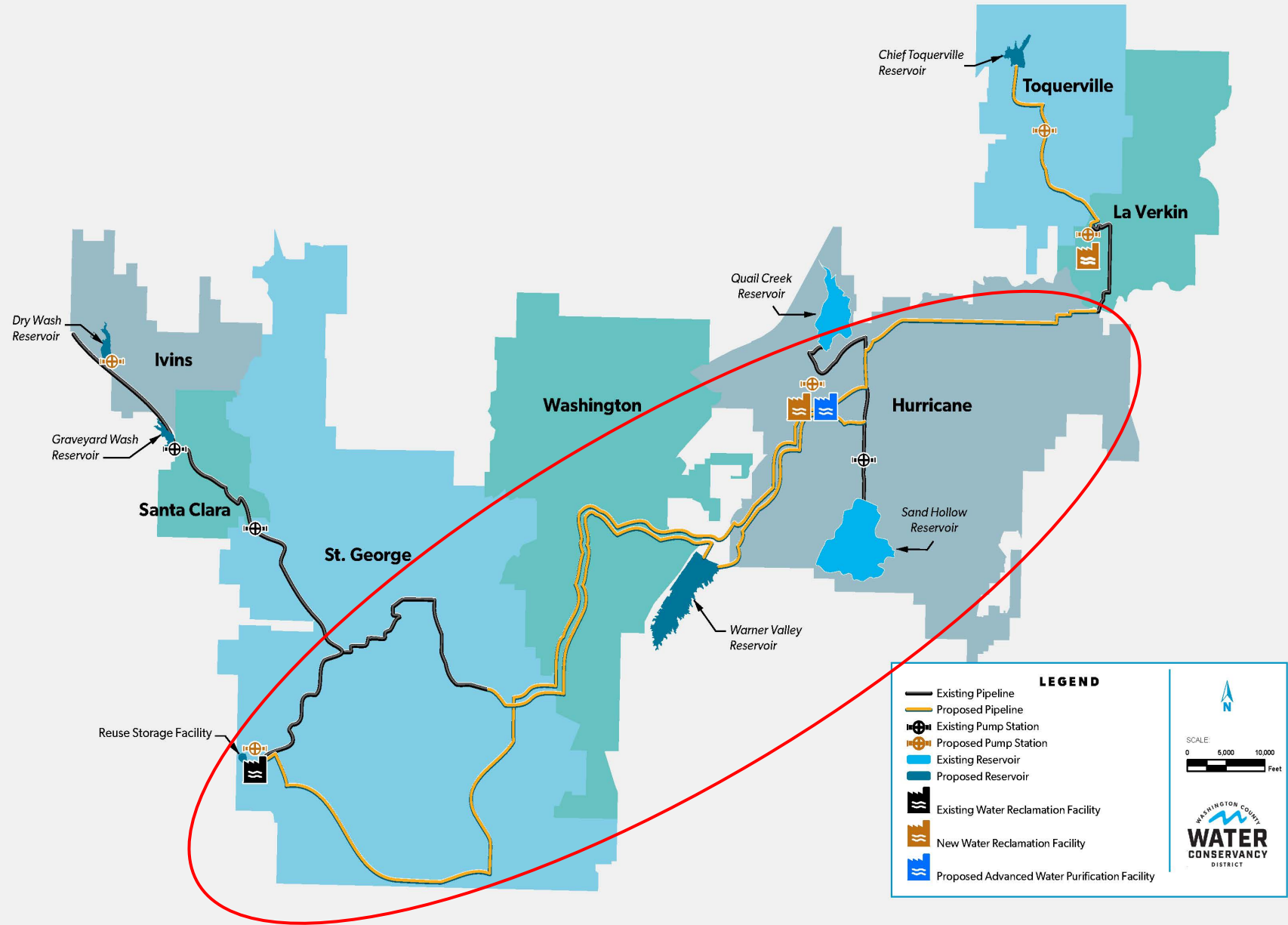




# REUSE: A Regional System



# REUSE: A Regional System



# REUSE: How the System Works

3



New or Expanded Water Reclamation Facilities

1



New Advanced Water Purification Facility

4

New Reservoirs



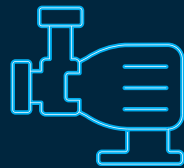
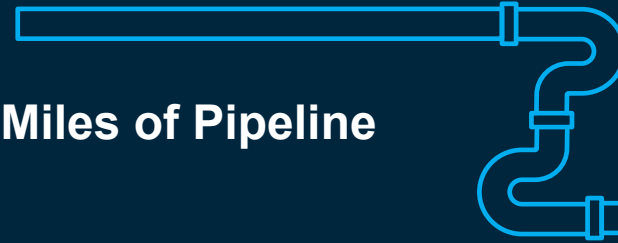
2



Existing Reservoirs

60

Miles of Pipeline



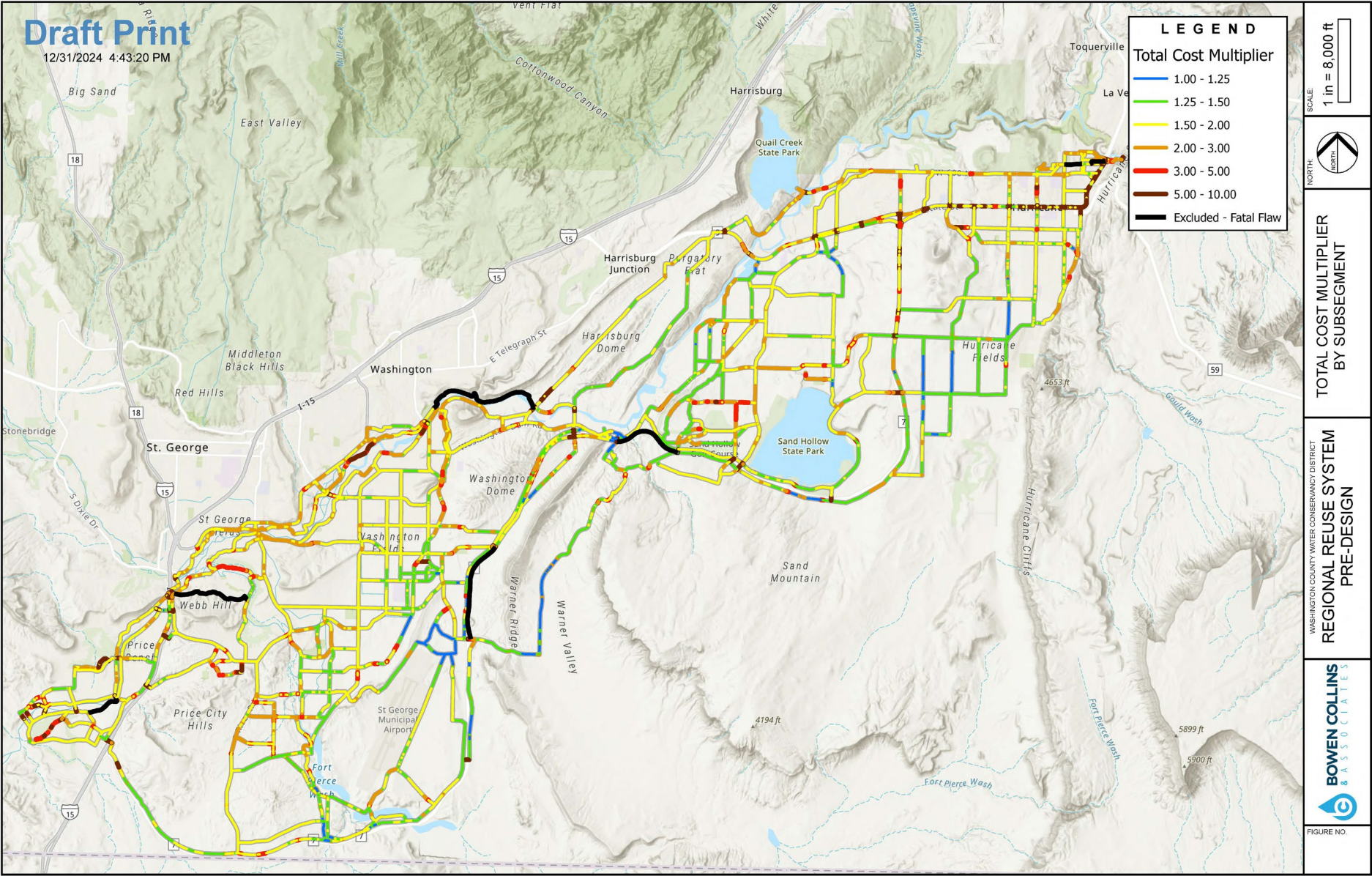
Multiple

Pump Stations



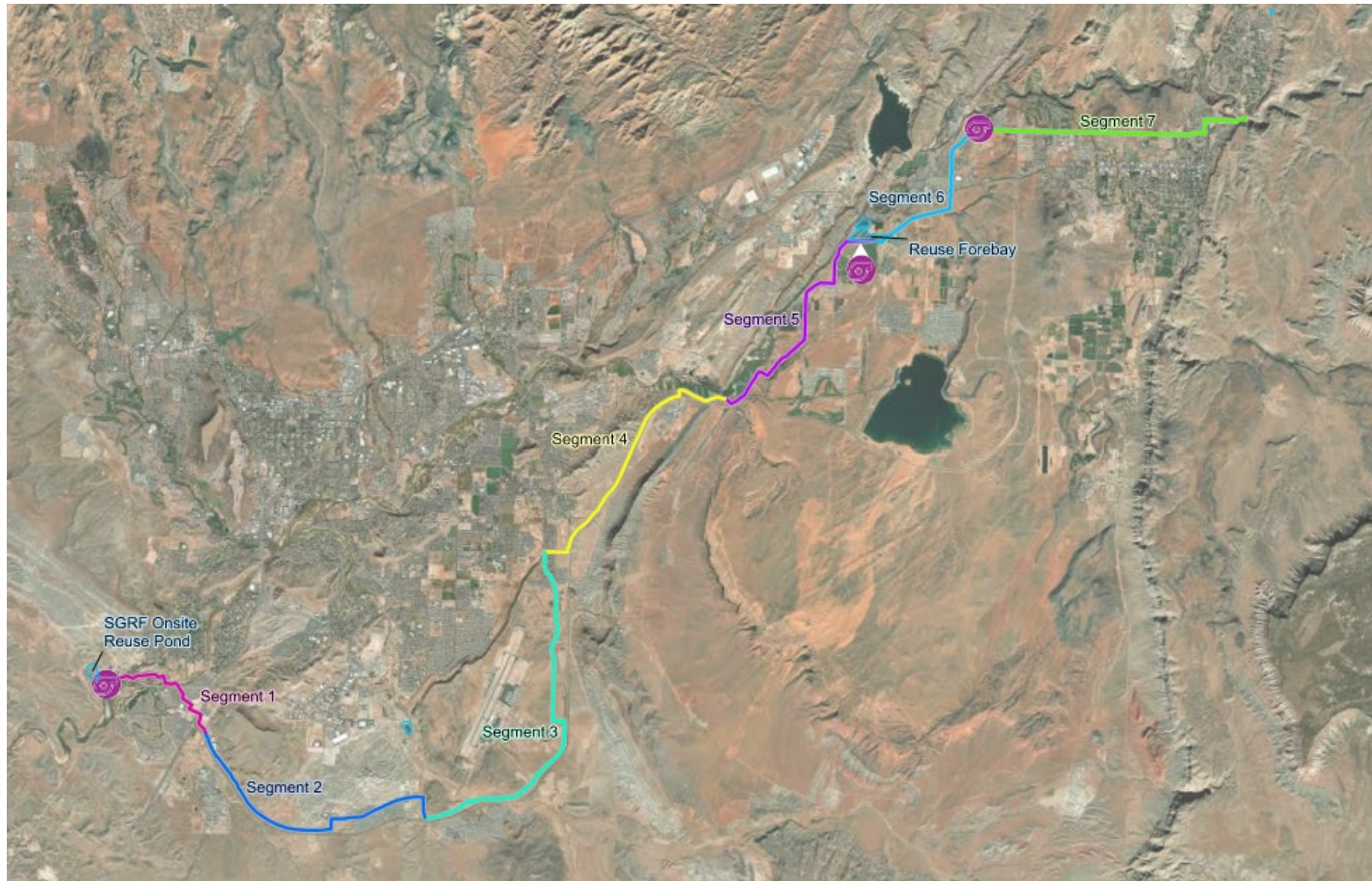


# REUSE: Pipeline Alignment Study





# REUSE: Preferred Alignment and Project Segments



# **REUSE:** **What's** **Next?**

**Pre-Solicitation Conference:**  
**June 24<sup>th</sup>, 2025**

**Finalize PDR and Design Packages:**  
**July 2025**

**Baseline Studies:**  
**Survey and Mapping – August 2025**  
**ROW Acquisition – September 2025**  
**Preliminary Geotech – September 2025**

**Project Management Support:**  
**September/October 2025**

**Design Consultants – Conveyance:**  
**December 2025**





**REUSE:**

## **Survey and Mapping Services**

### **Scope of Work:**

- **First 90 Days:**
  - Aerial Orthoimagery along pipeline corridor and project sites
  - Elevation and Terrain Data - LiDAR
  - Control points for each project
- **Project Support:**
  - Support for engineering design teams
  - Support for ROW / Land Acquisition consultant
  - Support through remainder of project life – hourly rates

# SOQ Review and Selection

- Review Process
  - 10 Submissions
  - Committee (Program Partners and OA)
    - WCWCD, ACSSD, St. George, Stantec
  - Scored on:
    - Qualifications, Knowledge and Experience, Management Plan, References

- Selected Firm:





# Scope of Work and Fee Proposal

- Contract Amount: \$404,900.00
- Contract includes hourly rates for continued project support

PHASE	NO.	TASK DESCRIPTION	FEE	FEE TYPE
INITIAL SURVEY	3.1	Project Coordination & Management	28,400	Lump Sum
	3.2	Project Area Research	9,500	Lump Sum
	3.3	Aerial Imagery Acquisition & Processing	88,800	Lump Sum
	3.4	Elevation & Terrain Data	100,600	Lump Sum
	3.5	Geodetic Control	91,400	Lump Sum
	3.6	Coordinate System & Datum Resolution	14,700	Lump Sum
	3.9	Quality Assurance & Reporting	31,500	Lump Sum
		<b>SUBTOTAL</b>	<b>364,900</b>	<b>Lump Sum</b>
SUPPLEMENTAL	3.7	Engineering Team Support	*10,000	Hourly
	3.8	ROW/Easement/LA Team Support	*10,000	Hourly
	3.10	CAD Standards Support	*10,000	Hourly
	3.11	Additional Services	*10,000	Hourly
		<b>SUBTOTAL</b>	<b>*40,000</b>	<b>Hourly</b>



## Item 4- Recommendation

- Move to approve the Agreement for Survey and Mapping Services with Civil Science for \$404,900



## 5. Consider approval of Interlocal Agreement between the City of St. George and WCWCD regarding the Graveyard Wash Reservoir and the Sand Hollow Mitigation Area

- Morgan Drake, WCWCD, Reuse Program Manager
- For action



# Graveyard Wash Reservoir

## Project Description

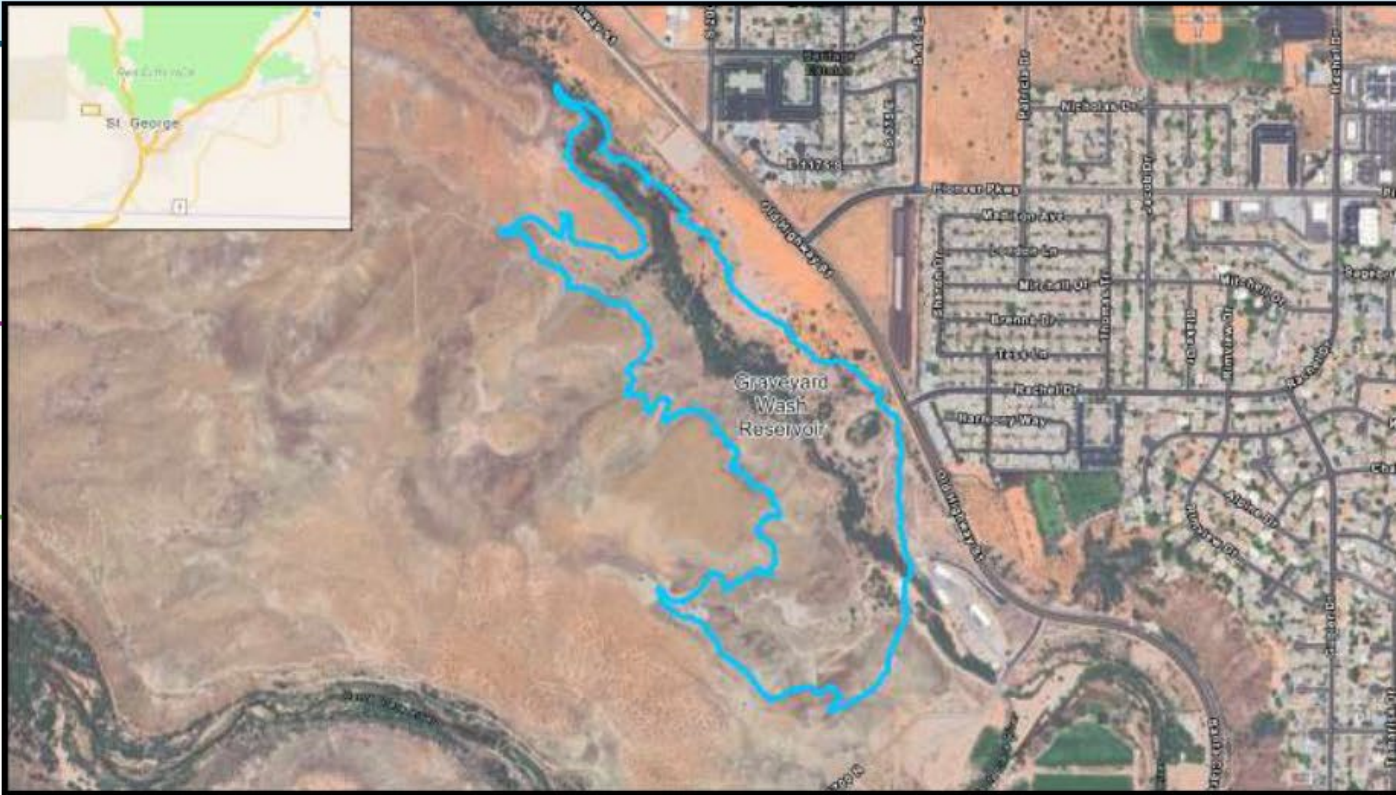
Graveyard Wash Reservoir will be an earthfill dam owned and operated by St. George City to store non-potable reuse from the SGRF.

## Features

- 2,000 acre-foot storage capacity

## Assumptions

- Project includes a new filter station for irrigation water.
- Schedule assumes securing U.S. Army Corps of Engineers permit in 2025.



PROGRAM PARTNER: **SGC** | PHASE: 1

### Project Schedule

2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
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# Sand Hollow Wash Mitigation Area

Snow Canyon High School

Sand Hollow Aquatic Center



# Item 5 - Recommendation

Move to approve Interlocal Agreement Between the City of St. George and the Washington County Water Conservancy District Regarding the Graveyard Wash Reservoir and the Sand Hollow Mitigation Area



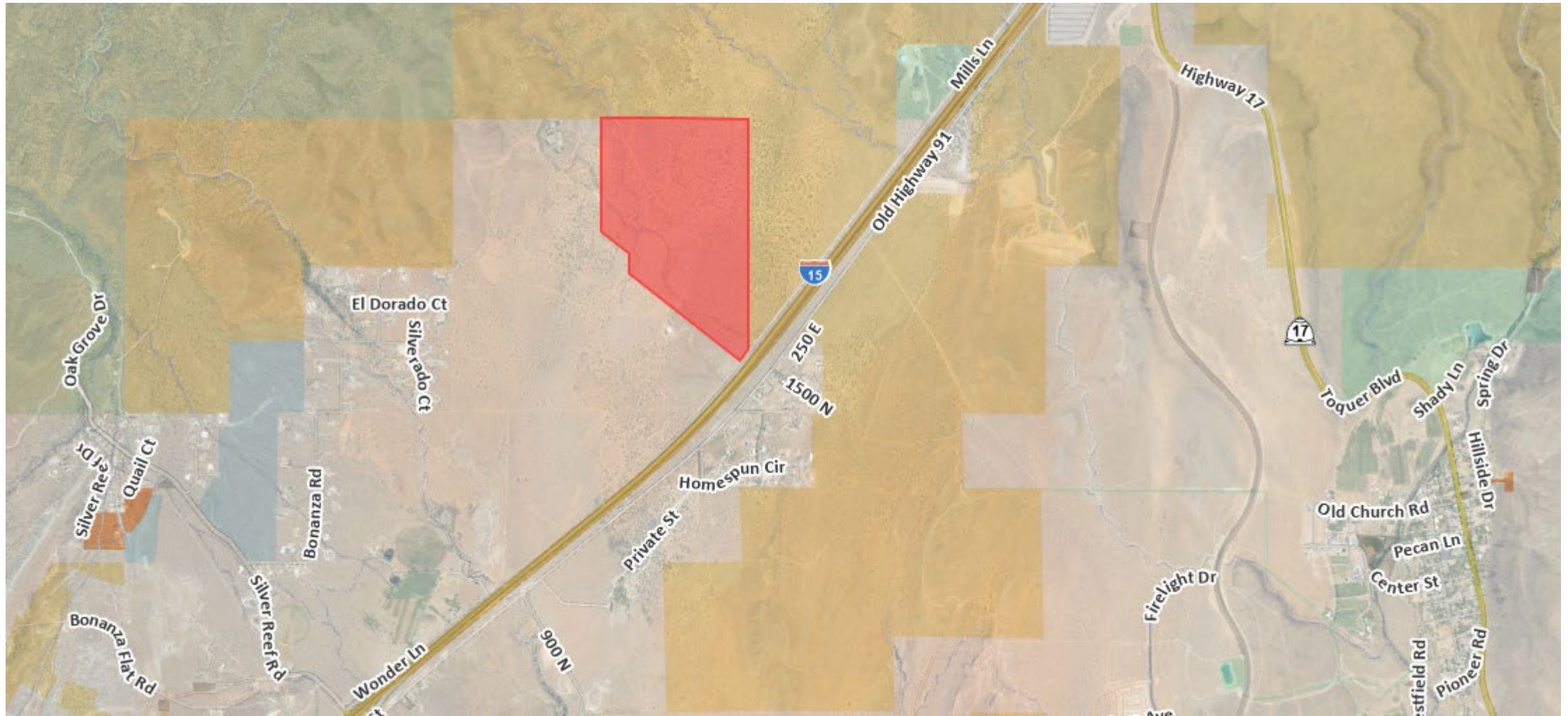
## 6. Consider approval of Development & Water Services Agreement with Solara Communities

- Brie Thompson, WCWCD, Associate General Manager
- For action





# Solara Communities





# Item 6 - Recommendation

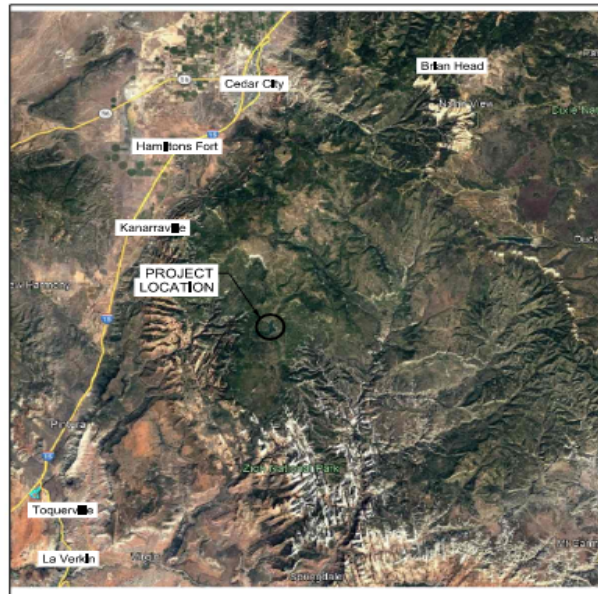
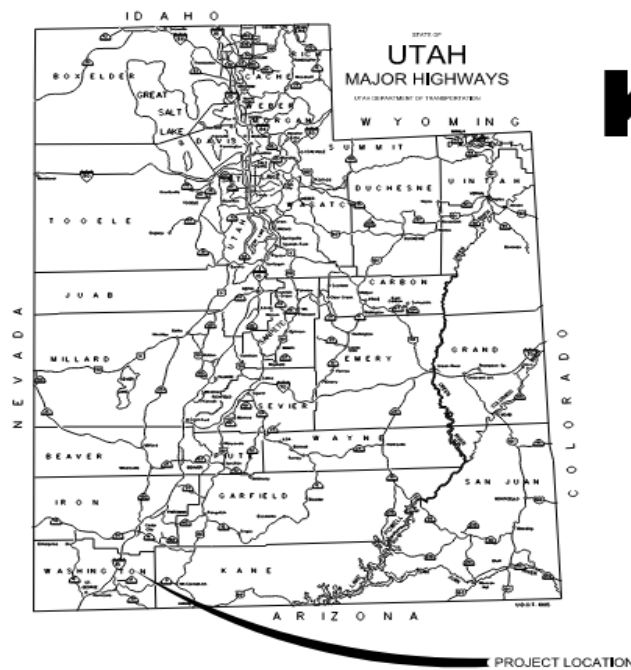
Move to approve the Development and Water Service Agreement with RE Developers, LLC and Solara Communities, LLC



# 7. Consider approval of bid for Kolob Creek Dam Spillway Repair

- George Elliott, WCWCD, Project Manager
- For action





VICINITY MAP

# KOLOB CREEK DAM SPILLWAY

WASHINGTON COUNTY, UTAH



SITE AERIAL PHOTO



WASHINGTON COUNTY  
WATER CONSERVANCY DISTRICT

GENERAL MANAGER

ZACH RENSTROM

BOARD OF TRUSTEES

ED BOWLER

ASSOCIATE GENERAL MANAGER

PROJECT DEVELOPMENT

COREY CRAM

VICTOR IVERSON

MICHELE RANDALL

KRESS STAHELI

ADAM BOWLER

CHRIS HART

KEVIN TERVORT

PROJECT MANAGER

GEORGE ELLIOTT

## OWNER'S ACCEPTANCE

THE WASHINGTON COUNTY WATER CONSERVANCY DISTRICT CERTIFIES THAT THEY ACCEPT THE PLANS AND SPECIFICATIONS FOR THE CONSTRUCTION OF KOLOB CREEK DAM SPILLWAY

ASSOCIATE GENERAL MANAGER

DATE

WATER RIGHTS

XXXX

SEAL

NOT FOR CONSTRUCTION		DATE
DESIGNED BY	CHECKED BY	DATE
DRAWN BY	APPROVED BY	DATE
1435 WEST 820 NORTH PROVO, UTAH 84601 801 374-5771 FAX		
RB&G ENGINEERING, INC.		
KOLOB CREEK DAM WASHINGTON COUNTY, UTAH		
TITLE SHEET		
DRAWING NO. <b>G100</b>		











CONTRACTOR	BID AMOUNT
WHITAKER CONSTRUCTION	\$1,324,415.00
CONDIE CONSTRUCTION	\$1,231,530.12
<b>INTERSTATE ROCK PRODUCTS</b>	<b>\$1,055,005.00</b>

ENGINEER'S ESTIMATE  
\$1,017,000



# Item 7 - Recommendation

Move to approve the bid for the Kolob Creek Dam Spillway Repair Project to Interstate Rock in the amount of \$1,055,005



## 8. Manager's report

- Zach Renstrom, WCWCD, General Manager
- For information





## 9. Consider approval of July 7, 2025 & July 28, 2025 board meeting minutes

- Zach Renstrom, WCWCD, General Manager
- For action



# Item 9 - Recommendation

Move to approve the July 7, 2025 & July 28, 2025, board meeting minutes



# Thank you for participating in this board meeting



[wcwcd.gov](http://wcwcd.gov)



[info@wcwcd.gov](mailto:info@wcwcd.gov)

