BOARD OF TRUSTEES PUBLIC MEETING

Meeting date:	May 6, 2024
Time:	6 p.m.
Location:	533 E. Waterworks Dr., St. George, UT 84770
Participants:	Board members present included Ed Bowler, Victor Iverson, Kress Staheli, Adam Bowler, Chris Hart, and Kevin Tervort. Michele Randall was not present. District staff included Zach Renstrom, general manager; Mindy Mees, secretary; Jodi Richins, attorney; Brie Thompson, Brock Belnap, and Corey Cram, associate general managers; and Morgan Drake, reuse program manager. Other meeting attendees are noted on the attached sign-in sheet.

1. ***Public hearing regarding the issuance and sale of not more than $20,000,000 aggregate principal amount of Water Revenue and Refunding Bonds, Series 2024, and any potential economic impact that the improvements, facility, or property financed in whole or in part with the proceeds of the bonds may have on the private sector.***

   Treasurer Jacob Sullivan explained this public hearing is to allow the District to refund the 2017 series of bonds, resulting in a significant saving of interest over the remaining life of the bonds, and it will provide funds for future water right purchases.

   Chairman Ed Bowler opened the hearing for public comment.

   There were no public comments, and the public hearing was closed.

2. ***Consider approval of P-Card for employee Diego Escobar***

   General Manager Zach Renstrom explained that the District's new employee Diego Escobar will need a purchasing card (P-Card). The District's policy requires board Approval for the issuance of p-cards for employees. Mr. Renstrom recommended that the board approve the p-card for Diego Escobar.

   Chris Hart made a motion to approve the P-card for Diego Escobar, the motion was seconded by Adam Bowler, and all voted aye.

3. ***Consider approval of joint funding agreement with the United States Geological Survey***

   Associate General Manager Brie Thompson explained the District has a history of doing joint funding agreements with the United States Geological Survey (USGS) to fund projects that are helpful. There has been a proposal to continue work in the Sand Hollow area which includes: the Sand Hollow recharge project, quantifying the impact of urban recharge on the Virgin River; a couple of new projects in the Hildale area to characterize the groundwater; and water quality investigations on potential groundwater resources in Apple Valley. The proposed total funding from the District is $158,700 and USGS would fund $71,300.

The Sand Hollow project will help the District identify how much water is being recharged annually. The study will look at how much irrigation and other water sources might be recharging the aquafer and will also how much irrigation is adding to the flows of the Virgin River.

The Hildale study will examine the potential for groundwater in the area. The District intends to enhance the existing data by drilling additional wells, collecting samples, and analyzing various compounds. This approach will provide a clearer picture of the water availability in the Hildale area.

In Apple Valley there have been a few studies about how much groundwater is there. The District will work with USGS to understand the aquifers a little better.

Victor Iverson made a motion to approve the joint funding agreement with USGS in the amount of $158,700., the motion was seconded by Chris Hart, and all voted aye.

4. ***Regional Reuse System update***

Reuse Program Manager Morgan Drake gave an update on the regional reuse system and its infrastructure projects. Ms. Drake explained that successfully completing the reuse system will add 24,000-acre feet of water to the district's water supply, which is about half of the water needed for the district's 20-year plan.

Ms. Drake stated that the cooperation and participation of the district's municipal partners and the area's reuse water treatment providers, St. George City and Ash Creek Special Service District, are critical.

The regional reuse system adds additional potable water supplies in two ways. First, the system will provide treated Type I reuse water to agricultural and outdoor water users in exchange for river water that can be stored and treated for drinking. Second, the system will transition over time to advanced water treatment that treats the reuse water to advanced purified water for storage in the district's drinking water reservoirs for conveyance to drinking water treatment facilities. The second method is called indirect potable reuse.

Ms. Drake provided an overview of the various infrastructure components of the system, including treatment, conveyance, and storage. Construction of the reuse system will occur in phases, some of which is already underway. In the east of the county, Chief Toquer Reservoir is currently under construction. In addition, the Ash Creek Special Service District is building the Confluence Park Water Reclamation facility and designing the components necessary to connect the facility to the regional reuse system. On the west side of the county, Dry Wash Reservoir and Graveyard Reservoir, which will store reuse water, are undergoing final permitting.

In addition to generating new potable water supplies, the benefits of a regional system include additional flexibility, increased reliability of water deliveries to agricultural users, and drought resiliency.

Because it is a regional system, the program partners have worked together to secure close to $30 million in funding. Plus, there is a pending application that if successful will result in almost $50 million in total secured funds for the system, thus far.

However, the grant funding includes a 75% match that requires rapid progress to qualify for the full amount of the award. The District must spend $90 million in the next 18 months. If the District receives the additional grant that is currently pending, the District must spend at least $170 million in the next 18 months to qualify for the full amount.

In response to a question from Mayor Kress Staheli, Ms. Drake responded that the pending grant application is from the Bureau of Reclamation's large scale water recycling program. The District

applied for funds under two phases; the first phase was for feasibility and permitting costs; the second phase for construction.

In response to questions from Commissioner Victor Iverson, Ms. Drake responded that Graveyard Reservoir is undergoing final permitting with the Army Corps of Engineers while Dry Wash Reservoir is currently under review to determine whether the Army Corp will assert jurisdiction. Also, the district is working with the state of Utah for necessary reuse discharge and groundwater permits. Ms. Drake said that because of a deadline for eligibility for Division of Water Quality funding, the permits need to be in place by the end of this year. Ms. Drake said that both Dry Wash and Graveyard are at about 60% design.

Mayor Chris Hart commented that the District is working with Ivins City and the residents within Ivins that have brought forward concerns over various impacts having to do with Dry Wash reservoir.

In response to a question from Mayor Staheli regarding the relatively small storage capacity of Chief Toquer, Graveyard, and Dry Wash Reservoirs, Ms. Drake said that the potential Warner Valley reservoir may have a capacity of up to 55,000 acre-feet. But Warner Valley will require extensive study and planning that has yet to be done. Warner Valley will be one of the final phases of the reuse system and has not been included in the 20-year plan because its timeline is uncertain. The current funding applications are specifically for the permitting and development stages of this first phase.

In response to a question about the sources of funding for the reuse program from Mayor Staheli, Mr. Renstrom said that Applied Analysis, a financial analysis firm, has reviewed the funding mechanisms available for the 20-year plan and concluded that the Board will have flexibility to fund the reuse system and the 20-year plan. In addition, the state of Utah has authorized a $200 million loan to the district.

In response to questions from Board members regarding various components of the reuse program, Ms. Drake said the district anticipates an increase of reuse water availability beginning in 2026 when the Chief Toquer Reservoir and pipeline to Ash Creek Confluence Park Water Treatment Facility come online. Additional reuse water will become available with the completion of Graveyard and Dry Wash Reservoirs on the west side. The amount of available reuse water will increase dramatically in about 2030 once all the conveyance infrastructure is completed to facilitate agricultural exchanges. By 2030 the District will fully be implementing the reuse storage benefit of Chief Toquer, Graveyard and Dry Wash Reservoirs for agricultural exchanges that free up additional potable water.

Ms. Drake mentioned that the Ash Creek Sewer Lagoons will convert to mechanical treatment around 2030 and that the St. George Reclamation Facility also has a planned expansion to produce more Type I reuse water.

In response to a question about the timing of Warner Valley Reservoir, Mr. Renstrom said that it will probably be around twenty years before Warner Valley comes online. A lot of geotechnical work needs to be done before design can begin. The current plan is that the district will not have Warner Valley until sometime after 2040. Chairman Bowler commented that if the District could get Warner Valley quicker it would solve a lot of problems.

In response to a question regarding indirect potable reuse, Ms. Drake said that indirect potable reuse is currently a small component of the reuse system. The Large-Scale Water Recycling Grant application the district has applied for includes a potable reuse demonstration facility for the purpose of driving the development of permitting structures and regulations that the state of Utah currently lacks.

In response to a question from Mayor Staheli, Ms. Drake stated that the Cove Reservoir project is not part of the reuse program.

The Board complimented Ms. Drake for the update.

5. ***Consider approval of Regional Reuse System Owner Advisor Annual Workplan with Stantec***

Ms. Drake explained the District issued a formal request for statement of qualifications for owner advisor services to assist with the development and delivery of the regional reuse system. Stantec Consulting Services was the highest-ranking design professional. The owner advisor will assist the District with initiation, planning, analysis, permitting, procurement, design, value engineering, system integration, construction, and post-construction review of the regional reuse system. The district is working with outside legal counsel on a contract for these services.

The annual workplan scope of work and fee for 2024 establishes the program management plan and controls so each component of the reuse system can be efficiently delivered, and funding deadlines met. It also includes deliverables such as preliminary design, reports, and studies. The reuse program will utilize and operate within the District's project delivery system currently being developed.

In response to a question from Mayor Staheli about the timing and amount of the contract, Ms. Drake stated that it is a five-year contract, but the annual workplan fee covers the scope of work for the first year. Ms. Drake stated that the contract is on an "as needed" basis. Mr. Renstrom stated that grant funding will help pay for some of the contract costs.

Adam Bowler made a motion to approve the Regional Reuse System owner advisor annual workplan with Stantec for $4,289,500, subject to execution of an agreement approved by district staff, the motion was seconded by Kevin Tervort, and all voted aye.

6. ***Consider approval of Engineer Agreement with Bowen Collins & Associates for the Regional Reuse System Preliminary Design Report***

Project Manager Trinity Stout explained the District put out a request for statements of qualifications for qualified engineers to perform an alignment study and to provide a preliminary design report for the conveyance components of the regional reuse system. The contract covers preliminary design up to 30% on some of the components and an alignment study so that the district can begin permitting and acquiring rights of way as soon as possible. Also, the contract includes work on an alignment study for work on the large diameter Quail Creek pipeline through Hurricane that was installed in the 1980s. The contract also includes design engineering guidelines as part of this contract to facilitate and accelerate the next phase of design.

Several qualified engineers submitted bids. Bowen Collins & Associates was selected because of their extensive experience with complex alignment studies and their familiarity with various municipalities and the overall reuse plan.

Victor Iverson made a motion to approve the Engineering Agreement with Bowen & Collins & Associates for Regional Reuse System Preliminary Design Report for $1,405,245.00, the motion was seconded by Chris Hart, and all voted aye.

7. ***Consider approval of Authorization Contract for Treatment of Domestic Wastewater Effluent with Ash Creek Special Service District the District***

Morgan Drake explained that reuse authorization contracts are required for reuse water right applications that must be filed with the State Engineer and approved by the end of the year to satisfy Department of Water Quality funding deadlines.

The District is focusing on the west side and east side separately to simplify the application and permitting process with the State Engineer.

There will be three categories of authorization contracts that will eventually come before the Board:
Treatment: program partners
Delivery: municipal partners
Reuse exchange: irrigation and canal companies

The District is currently focusing on the treatment and delivery contracts. The agreements before the Board today are an Authorization for Treatment of Domestic Wastewater Effluent with the Ash Creek Special Service District and Reuse Authorization Contracts with La Verkin and Toqeurville.

The treatment contract with Ash Creek Special Service district is necessary because it will produce the Type I reuse water that is used in the reuse system.

The reuse authorization contracts with La Verkin and Toquerville are interim contracts that will eventually be replaced with permanent contracts that address specific issues related to rates and volume of water. To meet the grant funding deadline the cities have graciously agreed to interim contacts for now for purposes of filing the reuse water right application with the State Engineer. We will eventually enter a contract with Hurricane, but for now La Verkin and Toquerville will produce the majority volume of influent to the Ash Creek treatment facility.

Chris Hart made a motion to approve the authorization contract for treatment of domestic wastewater effluent with Ash Creek Special Service District, the motion was seconded by Kevin Tervort, and all voted aye.

8. Consider approval of Reuse Authorization Contract with LaVerkin City

Chris Hart made a motion to approve the reuse authorization contract with LaVerkin City, the motion was seconded by Victor Iverson, and all voted aye.

9. Consider approval of Reuse Authorization Contract with Toquerville City

Chris Hart made a motion to approve the reuse authorization contract with Toquerville City, the motion was seconded by Kevin Tervort, and all voted aye.

10. Consider approval of bid for the Outfall Irrigation Pipeline Project

Project Manager Trinty Stout explained the Outfall Irrigation Pipeline Project will deliver Ash Creek water stored in Chief Toquer Reservoir to the Toquerville Secondary Water System (TSWS) and convey treated reuse water Confluence Park Water Reclamation Facility to the reservoir. The District put it out for bid and received eight bids. Interstate Rock came back with the lowest bid. The District recommends the board award the bid to Interstate Rock in the amount of $2,161,067.50.

Kress Staheli made a motion to approve the Outfall Irrigation Pipeline Project and award the bid to Interstate Rock Products for $2,161,067.50, the motion was seconded by Kevin Tervort, and all voted aye.

11. Consider approval of bid for replacement filters for Ivins Reservoir Filter Station

Associated General Manager Brie Thompson explained the District is the operator of the Santa Clara Project, which takes water from Gunlock Reservoir and delivers it to users. There is a pipeline that goes into Santa Clara and the District works with St. George City on the maintenance. The project has two filter stations along the pipeline, one is out of Gunlock reservoir and the other is at the base of Ivin's reservoir. There are three filters in that building, and two of them need replacement. The

District bid it out and received four bids, Scholzen's was the lowest bidder of $124,024.44. The District recommends the board award the bid to Scholzen's in the amount of $124,024.44.

Kevin Tervort made a motion to approve the bid for the replacement filters for Ivin's Reservoir filter station to Scholzen Products in the amount of $124,024.44, the motion was seconded by Chris Hart, and all voted aye.

12. ***Consider approval of Phases 2 and 3 of the Project Delivery System Contract with Hazen Sawyer***

Associate General Manager Brock Belnap explained that last October 2023, the board approved a contract with Hazen and Sawyer for phase one of a project to develop and implement a project delivery system. The District is ready to move into phase 2 and 3. Phase two is acquiring a software package and phase three involves implementing the software package and providing training. It is recommended that the board approve the total amount of $299,010.00 to finish the project delivery system.

Victor Iverson made a motion to approve the contract with Hazen Sawyer for phase 2 and 3 for the project delivery system in the amount of $299,008., the motion was by Kress Staheli, and all voted aye.

13. ***Conservation update***

Conservation Manager Doug Bennett presented an update on the water conservation program. The program has processed more than 2300 applications, completed 1100 projects, removed 1.4 million square feet of turf, and distributed about $2.6 million in rebates. The District staff has conducted more than 3300 in-person site visits. The average project is 1600 square feet, and it is estimated these projects are saving about 63,000,000 gallons annually. The amount of sod that has been taken out and replaced with water efficient landscaping would stretch 178 miles and compare to twenty-four football fields.

Chris Hart commented that at the Growing Utah Water Smart Conference they learned that 10% of the outdoor water use is lost because of the irrigation system design and installation. Ivin's City has a draft of residential irrigation standards that will be adopted.

Mr. Bennett explained that the District, Conserve Southwest Utah, Southern Utah Home Builders Association, and Star Nursery will be hosting a Parade of Gardens in the fall. This is an opportunity for the community to set foot on other folks' property to look around at their yard and see what they are doing for a water efficient landscape.

Manager's report

Mr. Renstrom explained that there are some issues with the spillway at Kolob reservoir. The reservoir is 100% full, and when it is full water will start going over the spillway. With the issues of the spillway the District did some grouting, it was brought up that eventually the District is going to have rebuild the entire spillway. The District had the dam safety engineer look at it, and right now it is safe. There has been talk of raising Kolob reservoir, it might need to be done sooner than what the District was planning to do.

Mr. Renstrom would like to arrange a trip in October or November with the board, mayors, and key staff to visit reuse facilities either in San Diego or Los Angeles. Karry Rathje will be reaching out to get it scheduled.

14. <u>Consider approval of April 1, 2024, board meeting minutes</u>

Chris Hart made a motion to approve the April 1, 2024, board meeting minutes, the motion was seconded by Adam Bowler, and all voted aye.

The meeting was adjourned upon motion.

Mindy Mees
_____
Secretary

St. George, Utah

May 6, 2024

The Board of Trustees (the "Board") of the Washington County Water Conservancy District, Utah, met in regular public session at the regular meeting place of the Board in St. George, Utah, on Monday, May 6, 2024, at the hour of 6:00 p.m., with the following members of the Board being present:

Ed Bowler	Chair
Adam Bowler	Boardmember
Chris Hart	Boardmember
Victor Iverson	Boardmember
Michele Randall	Boardmember
Kress Staheli	Boardmember
Kevin Tervort	Boardmember

Also present:

Zach Renstrom	General Manager
Mindy Mees	Secretary

Absent: Michele Randall

After the meeting had been duly called to order and after other matters not pertinent to this resolution had been discussed, the District Secretary presented to the Board a Certificate of Compliance with Open Meeting Law with respect to this May 6, 2024, meeting, a copy of which is attached hereto as Exhibit A.

The District Secretary noted that pursuant to the provisions of the Local Government Bonding Act, Title 11, Chapter 14, Utah Code Annotated 1953, as amended, a "Notice of Public Hearing and Bonds to be Issued" with respect to the issuance of the Board's proposed water revenue and refunding bonds in the principal amount of not to exceed $20,000,000 was (i) posted on the Utah Public Notice Website (http://pmn.utah.gov), (ii) posted on the District's official website, and (iii) posted in a public location within the District that is reasonably likely to be seen by residents of the District on April 22, 2024 (a date no less than 14 days prior to this hearing).

The hearing was then opened to all members of the public desiring to give input with respect to the issuance by the Board of its water revenue bonds.

After all such input, if any, with respect to the issuance by the Board of its water revenue bonds was presented, the public hearing was closed.

This May 6, 2024.

(SEAL)

ATTEST:

By:_____
Chair

By:_____
District Secretary

(Other business not pertinent to the foregoing appears in the minutes of the meeting.)

Upon the conclusion of all business on the Agenda, the meeting was adjourned.

(SEAL)

ATTEST:

By:_____
Chair

By:_____
District Secretary

STATE OF UTAH)
: ss.
COUNTY OF WASHINGTON)

I, Mindy Mees, the duly appointed and qualified District Secretary of Washington County Water Conservancy District, Utah (the "Issuer"), do hereby certify according to the records of the Board of Trustees of the Issuer (the "Board of Trustees") in my official possession that the foregoing constitutes a true and correct excerpt of the minutes of the meeting of the Board of Trustees held on May 6, 2024.

IN WITNESS WHEREOF, I have hereunto subscribed my signature and impressed hereon the official seal of said Issuer, this May 6, 2024.

(SEAL)

By: _____
District Secretary

EXHIBIT A

CERTIFICATE OF COMPLIANCE WITH
OPEN MEETING LAW

I, Mindy Mees, the undersigned District Secretary of the Washington County Water Conservancy District, Utah (the "Issuer"), do hereby certify, according to the records of the Issuer in my official possession, and upon my own knowledge and belief, that in accordance with the requirements of Section 52-4-202, Utah Code Annotated, 1953, as amended, I gave not less than twenty-four (24) hours public notice of the agenda, date, time and place of the May 6, 2024, public meeting held by the Board of Trustees of the Issuer (the "Board of Trustees") as follows:

(i) By causing a Notice, in the form attached hereto as Schedule 1, to be posted at the District's principal offices at least twenty-four (24) hours prior to the convening of the meeting, said Notice having continuously remained so posted and available for public inspection until the completion of the meeting;

(ii) By causing a copy of such Notice, in the form attached hereto as Schedule 1, to be posted to the Utah Public Notice Website (http://pmn.utah.gov) at least twenty-four (24) hours prior to the convening of the meeting; and

(iii) By causing a copy of such Notice, in the form attached hereto as Schedule 1, to be posted on the District's official website at least twenty-four (24) hours prior to the convening of the meeting.

In addition, the Notice of 2024 Annual Meeting Schedule for the Board of Trustees (attached hereto as Schedule 2) was given specifying the date, time, and place of the regular meetings of the Board of Trustees to be held during the year, by causing said Notice to be (i) posted in December 2023 at the principal office of the Issuer, (ii) published on the Utah Public Notice Website (http://pmn.utah.gov) during the current calendar year and (iii) posted on the District's official website.

IN WITNESS WHEREOF, I have hereunto subscribed my official signature this May 6, 2024.

(SEAL)

By: _____
District Secretary

SCHEDULE 1

NOTICE OF MEETING

WASHINGTON COUNTY
WATER
CONSERVANCY
DISTRICT

NOTICE OF PUBLIC HEARING AND BONDS TO BE ISSUED

NOTICE IS HEREBY GIVEN pursuant to the provisions of the Local Government Bonding Act, Title 11, Chapter 14, Utah Code Annotated 1953, as amended, and the Utah Refunding Bond Act, Title 11, Chapter 27, Utah Code Annotated 1953, as amended (collectively, the "Act"), that on April 1, 2024, the Board of Trustees (the "Board") of the Washington County Water Conservancy District, Utah (the "Issuer"), adopted a resolution (the "Resolution") in which it authorized the issuance of the Issuer's Water Revenue and Refunding Bonds, Series 2024 (the "Series 2024 Bonds") (to be issued in one or more series and with such other series or title designation(s) as may be determined by the Issuer) and called a public hearing to receive input from the public with respect to (a)the issuance of the Series 2024 Bonds and (b)any potential economic impact that the Project described herein to be financed with the proceeds of the Series 2024 Bonds issued under the Act may have on the private sector.

TIME, PLACE AND LOCATION OF PUBLIC HEARING

With regard to that portion of the Series 2024 Bonds issued pursuant to the Local Government Bonding Act, Title 11, Chapter 14, Utah Code Annotated 1953, as amended, the Issuer shall hold a public hearing on May 6, 2024, at the hour of 6:00 p.m. at 533 E. Waterworks Dr., St. George, Utah. The purpose of the hearing is to receive input from the public with respect to (a)the issuance of the Series 2024 Bonds and (b)any potential economic impact that the Project to be financed with the proceeds of the Series 2024 Bonds may have on the private sector. All members of the public are invited to attend and participate.

PURPOSE FOR ISSUING THE SERIES 2024 BONDS

The Series 2024 Bonds will be issued for the purpose of (a) financing the acquisition and/or construction of certain improvements to its water system (the "System") including, but not limited to, (a) the purchase of water rights for the purpose of providing water to certain rural areas of Washington County, Utah, such as the municipalities of Enterprise, New Harmony and Apple Valley, and (b) related improvements (collectively, the "Project") (b) refunding all or a portion of the Issuer's outstanding Water Revenue Refunding Bonds, Series 2015 (the "Refunded Bonds") and (c) paying costs of issuance of the Series 2024 Bonds.

PARAMETERS OF THE SERIES 2024 BONDS

The Issuer intends to issue the Series 2024 Bonds in the aggregate principal amount of not more than Twenty Million Dollars ($20,000,000), to mature in not more than thirty (30) years from their date or dates, to be sold at a price not less than ninety-eight percent (98%) of the total principal amount thereof and bearing interest at a rate or rates not to exceed six percent (6.00%) per annum. The Series 2024 Bonds are to be issued and sold by the Issuer pursuant to the Resolution, including

as part of said Resolution, an Original Master Resolution and a Supplemental Resolution (together, the "Master Resolution") which were before the Board in substantially final form at the time of the adoption of the Resolution and said Master Resolution is to be executed by the Issuer in such form and with such changes thereto as shall be approved by the Issuer; provided that the principal amount, interest rate or rates, maturity, and discount of the Series 2024 Bonds will not exceed the maximums set forth above. The Issuer reserves the right to not issue the Series 2024 Bonds for any reason and at any time up to the issuance of the Series 2024 Bonds.

REVENUES PROPOSED TO BE PLEDGED

The Series 2024 Bonds are special limited obligations of the Issuer payable from the net revenues of the System.

OUTSTANDING BONDS SECURED BY REVENUES

The Issuer has outstanding bonds of $43,518,120 secured by the net revenues of the System.

OTHER OUTSTANDING BONDS OF THE ISSUER

Additional information regarding the Issuer's outstanding bonds may be found in the Issuer's annual financial report (the "Financial Report") at: https://reporting.auditor.utah.gov/searchreport. For additional information, including any information more recent than as of the date of the Financial Report, please contact Zach Renstrom, General Manager at (435) 673-3617.

TOTAL ESTIMATED COST OF BONDS

Based on the Issuer's current plan of finance and a current estimate of interest rates, the total principal and interest rate cost of the Series 2024 Bonds to be issued under the Act to finance the Project, if held until maturity, is $ 20,000,000.00 .

A copy of the Resolution and the Master Resolution are on file in the office of Washington County Water Conservancy District, 533 E. Waterworks Dr., St. George, Utah, where they may be examined during regular business hours of the Issuer from 8:00 a.m. to 5:00 p.m. Monday through Friday, for a period of at least thirty (30) days from and after the date of posting of this notice.

NOTICE IS FURTHER GIVEN that a period of thirty (30) days from and after the date of the posting of this notice is provided by law during which (i) any person in interest shall have the right to contest the legality of the Resolution, the Master Resolution (as it pertains to the Series 2024 Bonds), or the Series 2024 Bonds, or any provision made for the security and payment of the Series 2024 Bonds, and that after such time, no one shall have any cause of action to contest the regularity, formality, or legality thereof for any cause whatsoever.

DATED this April 22, 2024.

Mindy Mees
/s/ District Secretary

SCHEDULE 2

ANNUAL MEETING SCHEDULE

Memo

To Zachary Renstrom, General Manager

From Brie Thompson, Associate General Manager

Date May 1, 2024

SUBJECT WCWCD/USGS Joint Funding Agreement

Situation
The Operations and Planning Department of the Washington County Water Conservancy District (district) needs to better understand water availability and reliability in multiple areas of the county to assist in its long-term planning efforts.

Background
The district and United States Geological Survey (USGS) have previously jointly funded studies assessing Navajo Sandstone recharge by Sand Hollow Reservoir and the impact of urban return flows on the Virgin River. The district and USGS want to continue work on these studies as well as investigate groundwater conditions in the Hildale and Apple Valley areas. The funded and proposed work tasks in this joint funding agreement are as follows:

1. Calculation of monthly Sand Hollow recharge volumes for calendar year 2023.
2. Environmental tracer sampling for groundwater travel times of reservoir recharge during spring 2024, as well as additional sampling along Hurricane Bench near Gould's Wash to evaluate shallow local recharge.
3. Additional seepage run with data collection for mixing model in Virgin River.
4. Recharge characterization upgradient of Hildale Groundwater Development Project.
5. Water-quality investigations on potential groundwater resources in Apple Valley.

The proposed joint-funding agreement outlines a cost share of 31% by the USGS and the remaining 69% paid by the district.

Assessment
USGS has unique expertise and resources to help characterize water conditions and provide the district data it needs for long-term project planning. The cost share by USGS makes the jointly funded studies an affordable option for the district to obtain needed information, and the published research is a benefit to the public.

Recommendation
Approve the joint funding agreement with USGS for a cost of $158,700.00.

WASHINGTON COUNTY
WATER
CONSERVANCY
DISTRICT

Procurement Memo

To Zachary Renstrom, General Manager

From Brie Thompson, Associate General Manager

Date May 1, 2024

Subject Procurement of Navajo Sandstone and Saint George Groundwater Studies

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Type of Procurement: Non-Standard Procurement of Service

Item Description: As part of the WCWCD and United States Geological Survey (USGS) standard joint-funding agreement 24ZKJFA018, USGS will continue investigations associated with the Navajo Sandstone recharge study in the Sand Hollow area, urban return flows to the Virgin River, as well as new investigations involving groundwater resources in Hildale and Apple Valley.

Reason for Procurement: The Operations and Planning Department of the Washington County Water Conservancy District (district) needs to procure this service to better understand water availability and reliability in multiple areas of the county to assist in its long-term planning efforts.

Proposed Vendor: USGS

Circumstances for Using Non-Standard Procurement: The circumstances for using a non-standard procurement process and choosing this vendor are described in the attached procurement statement.

Purchase Amount: $158,700.00

Because the purchase amount is over $50,000, notice of the proposed procurement will be posted on the district's website for 7 days prior to entering into an agreement with the proposed vendor. Utah Code § 63G-6a-802(3)(a).

Contract Type(s): fixed price.

Accounting Codes:

1) 20-7520-300
2) 20-7520-300
3) 20-7520-300
4) 65-7700-300
5) 23-5510-300

Approved:

Zachary Renstrom, General Manager

United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Utah Water Science Center
2329 West Orton Circle
Salt Lake City, UT 84119-2047

April 1, 2024

Brie Thompson

Washington County Water Conservancy District
533 E. Waterworks Drive
St. George, UT 84770

Dear Brie:

Enclosed is our standard joint-funding agreement 24ZKJFA018 between the U.S. Geological Survey Utah Water Science Center and Washington County Water Conservancy District for negotiated deliverables (see attached), during the period October 1, 2023 through December 31, 2025 in the amount of $158,700 from your agency. U.S. Geological Survey contributions for this agreement are $71,300 for a combined total of $230,000. Please sign and return one fully-executed original to Randall Miles at rjmiles@usgs.gov or mail to the address above.

This is a fixed cost agreement to be billed quarterly via Down Payment Request (automated Form DI-1040). Please allow 30-days from the end of the billing period for issuance of the bill. If you experience any problems with your invoice(s), please contact Randall Miles at phone number (801) 908-5058 or rjmiles@usgs.gov.

The results of all work performed under this agreement will be available for publication by the U.S. Geological Survey. We look forward to continuing this and future cooperative efforts in these mutually beneficial water resources studies.

Sincerely,

Digitally signed by DAVID O'LEARY
Date: 2024.04.01 14:44:20 -06'00'

David O'Leary
Director, UTWSC

Enclosure
24ZKJFA018 (2)

Form 9-1366
(May 2018)

U.S. Department of the Interior
U.S. Geological Survey
Joint Funding Agreement
FOR
Water Resource Investigations

Customer #: 6000001675
Agreement #: 24ZKJFA018
Project #: ZK009CD
TIN #: 87-0388867

Fixed Cost Agreement YES[X] NO[ ]

THIS AGREEMENT is entered into as of the October 1, 2023, by the U.S. GEOLOGICAL SURVEY, Utah Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the Washington County Water Conservancy District party of the second part.

1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation for negotiated deliverables (see attached), herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.

2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include In-Kind-Services in the amount of $0.00

(a) $71,300 by the party of the first part during the period October 1, 2023 to December 31, 2025

(b) $158,700 by the party of the second part during the period October 1, 2023 to December 31, 2025

(c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: $0

Description of the USGS regional/national program:

(d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.

(e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.

3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.

4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.

5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.

6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.

7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.

8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program, and if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties. The Parties acknowledge that scientific information and data developed as a result of the Scope of Work (SOW) are subject to applicable USGS review, approval, and release requirements, which are available on the USGS Fundamental Science Practices website (https://www.usgs.gov/office-of-science-quality-and-integrity/fundamental-science-practices).

Form 9-1366
(May 2018)

U.S. Department of the Interior
U.S. Geological Survey
Joint Funding Agreement
FOR
Water Resource Investigations

Customer #: 6000001675
Agreement #: 24ZKJFA018
Project #: ZK009CD
TIN #: 87-0388867

9. Billing for this agreement will be rendered **quarterly**. Invoices not paid within 60 days from the billing date will bear Interest, Penalties, and Administrative cost at the annual rate pursuant the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

USGS Technical Point of Contact

Name:	Thomas Marston Supervisory Hydrologist
Address:	2329 West Orton Circle West Valley City, UT 84119
Telephone:	(801) 908-5030
Fax:	(801) 908-5001
Email:	tmarston@usgs.gov

Customer Technical Point of Contact

Name:	Brie Thompson
Address:	533 E. Waterworks Drive St. George, UT 84770
Telephone:	(435) 673-3617
Fax:	
Email:	brie@wcwcd.org

USGS Billing Point of Contact

Name:	Randall Miles Administrative Officer
Address:	2329 West Orton Circle West Valley City, UT 84119
Telephone:	(801) 908-5058
Fax:	(801) 908-5001
Email:	rjmiles@usgs.gov

Customer Billing Point of Contact

Name:	Brie Thompson
Address:	533 E. Waterworks Drive St. George, UT 84770
Telephone:	(435) 673-3617
Fax:	
Email:	brie@wcwcd.org

U.S. Geological Survey
United States
Department of Interior

Signature

By _____ Digitally signed by DAVID O'LEARY Date: 2024.04.01 14:45:13 -06'0 **Date:**

Name: David O'Leary
Title: Director, UTWSC

Washington County Water Conservancy District

Signatures

By _____ **Date:** 13-May-2024

Name: Zachary Renstrom
Title: Manager, WCWCD

Navajo Sandstone and Saint George Groundwater Studies: 2024 USGS Work Tasks under the WCWCD/USGS JFA

March 22, 2024

The funded and proposed FY2024 work tasks of the ongoing Navajo Sandstone Recharge Study,investigations associated with Saint George Urban Return Flows, as well as new reconnaisance for groundwater resources in Hildale and Apple Valley, Utah:

1. Calculation of monthly recharge volumes for calendar year 2023
2. Environmental tracer sampling for groundwater travel times of reservoir recharge during spring 2024, as well as additional sampling along Hurricane Bench near Goulds Wash to evaluate shallow local recharge.
3. Additional seepage run with data collection for mixing model in Virgin River
4. Recharge Characterization upgradient of Hildale Groundwater Development Project
5. Water-quality investgations on potential groundwater resources in Apple Valley, Utah

(1) Calculation of 2023 monthly volumes of recharge from Sand Hollow Reservoir

Monthly water budget calculations (Reservoir inflow/outflow, evaporation, well withdrawals, drain pumping, and managed aquifer recharge).

WCWCD Cost: $6,900; USGS match: $3,100

(2) 2022 Environmental tracers for groundwater travel times of reservoir recharge

Annual groundwater sampling and analysis of geochemical and age data from monitoring wells for tracing reservoir recharge through the Navajo Sandstone Aquifer to evaluate groundwater travel times. We will coordinate with WCWCD staff for electric-tape water-level comparisons. Additional wells near Hurricane will be identified for environmental tracer sampling to evaluate the potential for shallow groundwater recharge in the Goulds Wash area. Additional water-level measurements along the Hurricane Bench will be added to better quantify the potentiometric surface east of Sand Hollow Reservoir.

WCWCD Cost: $27,600; USGS Match $12,400

(3) Additional Seepage Studies for Virgin/Santa Clara Rivers

The second year of the in-stream modeling effort will continue data collection to better constrain groundwater and urban endmembers. Additional will occur during baseflow conditions in the Virgin River to minimize impacts from surfacewater inputs higher in the watershed. Additional samples will be collected from a variety of

groundwater sites within the urban corridor to help constrain the regional groundwater signal.

WCWCD Cost: $41,400; USGS Match $18,600

(4) Recharge Characterization upgradient of Hildale Groundwater Development Project

A collaborative project between WCWCD and Hildale City to develop groundwater resources is currently underway. The project proposes new well sites north of the city of Hildale that will affect the aquifer conditions in that region. BLM has requested a USGS study to examine the potential impacts of these wells. Given the lack of wells in the area to sample/test, this study will focus predominantly on the shallow groundwater interface with Short Creek, Water Canyon Creek, and Maxwell Canyon Creek, as well as any springs that provide tributary flow to these watersheds. Drive-point piezometers may also be implemented to sample the shallow groundwater system in these watersheds. A suite of groundwater environmental tracers will be used to assess the age and susceptibility of the groundwater resource to better understand the implications of future pumping.

WCWCD Cost: $48,300; USGS Match $21,700

(5) Water-quality investgations on potential groundwater resources in Apple Valley, Utah

Several recent assessments have been made on the sustainable yield of aquifers in the vicinity of Apple Valley and Cedar Point in southwestern Utah. Groundwater resources are limited in this region, with the shallow alluvial aquifer and the Shinarump Conglomerate serving as the primary targets for fresh groundwater. Recently, water quality issues from several wells screened in the region have raised concerns on the culinary viability of these aquifers in the future. The USGS will sample wells and local bedrock aquifer materal in the area to geochemically characterize the sources of elevated metals/radionuclides. A suite of groundwater environmental tracers will be used to compliment the geochemistry samples to assess the age and susceptibility of the groundwater resource to better understand the implications of future pumping.

WCWCD Cost: $34,500; USGS Match $15,500

Total FY2024 WCWCD cost: $158,700 USGS Cost: $71,300 (60%/40% cost share)

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

Procurement Memo

To Zachary Renstrom, General Manager

From Morgan Drake, Reuse Program Manager

Date May 1, 2024

Subject Procurement of Owner Advisor for Regional Reuse System

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Type of Procurement: Design Professional Procurement for Engineering Service

Item Description: Owner advisor's services to assist the Washington County Water Conservancy District (district) with initiation, planning, analysis, permitting, procurement, design, value engineering, system integration, construction, and post-construction review of the Regional Reuse System.

Reason for Procurement: The Regional Reuse Program of the district needs to procure this service to help the district efficiently and effectively deliver the Regional Reuse System. The Regional Reuse System is a critical component of the district's 20-year plan. The ability to plan, permit, design, procure, and construct the system in a timely manner is critical for the district's plan and to satisfy funding deadlines.

Review of Design Professionals: The following design professionals submitted statements in response to the district's Request for Statements of Qualifications. Stantec Consulting Services was the highest scoring design professional with which a satisfactory scope of work and fee was negotiated at a price fair and reasonable to the district.

1. Stantec: This design professional was determined to best meet the needs of the district because of its strong experience providing owner advisor services on large reuse projects and permitting complex water projects. A satisfactory scope of work and fee was negotiated with this design professional at a price fair and reasonable to the district.

2. Hazen and Sawyer: This design professional did not score as high as the successful design professional.

3. Horrocks: This design professional did not score as high as the successful design professional.

4. AE2S: This design professional did not score as high as the successful design professional.

5. Bodell: This design professional did not score as high as the successful design professional.

Purchase Amount: $4,289,500 (2024)

Contract Type(s): labor hour

The proposed contractor's accounting system will permit timely development of all necessary cost data in the form required by the above contract types. The proposed contractor's accounting system is adequate to allocate costs in accordance with generally accepted accounting principles, and the use of the above contract types is in the best interest of the district, taking into consideration the criteria set forth in Utah Code Annotated, Section 63G-6a-1205.

Accounting Code: 65-4620-323

Approved:

Zachary Renstrom, General Manager

Stantec Consulting Services Inc.
2890 E Cottonwood Pkwy, Suite 300
Salt Lake City, UT 84121

May 1, 2024
File: 181301727

Attention: Morgan Drake
Reuse Program Manager

Washington County Water Conservancy District
533 Waterworks Dr
Saint George, UT 84770

Dear Morgan Drake,

Reference: 2024 Owner Advisor Annual Workplan

Attached please find the Annual Workplan for the Reuse Program Owner Advisor for the remainder of 2024 along with the associated fee.

The fee aligns with each of those tasks and identifies individual resources, rates, and related hours. We have also assigned a 10 percent contingency to accommodate other requests by the district that are not as yet known. We have incorporated the district's comments on the scope and fee. The 2024 rate table is also attached.

This following table summarizes the task and fee at a high level. The details are as attached.

Task 1	OA Leadership	$356,736
Task 2	System Component Assessment	$423,638
Task 3	Mobilization/Initiation	$1,161,972
Task 4	2024 Early Program Delivery Activities	$1,944,058
	Subtotal	**$3,886,404**
Task 5	Contingency	$403,096
	Total	**$4,289,500**

Our desire is to provide the most flexibility to the district to request services of the OA and give us the vehicle to assist you in a timely manner.

Reference: **2024 Owner Advisor Annual Workplan**

We value our relationships with the district and your program partners and look forward to helping you advance the Regional Reuse System. Please contact us with any questions about our proposed scope and fee.

Regards,

Entity Name

J. Clinton Rogers P.E.
Vice President
Project Development Leader, Water

Phone: 801.617.3204
Fax: 801.680.4468

Attachment: AWP

c. Regan, M.
Cowden J.

rm document2

INTRODUCTION

This Annual Work Plan (AWP) identifies Owner Advisor (OA) planned services, planned staffing, estimated fees, and key assumptions for delivery of program management support services for the Washington County Water Conservancy District (district) for the period of April 2024 through December 2024.

PLANNED SERVICES

Program management services planned for this AWP period are identified in Table 1. We recognize that due to the complex nature and long duration of the Program, support needs may change as the program progresses and new information becomes available. The planned services represent our understanding of current Program needs for the AWP period.

PLANNED STAFFING

Planned staffing to provide services are identified in Table 2. This table includes the name, role, and planned labor hours by major program task. In instances where a specific individual has not yet been identified, a role and planned labor hours are identified. Specific personnel to support the Program shall be identified in writing and authorized by the Program Manager. The personnel and labor hours within this AWP represent our understanding of the strategic, technical, and administrative requirements for delivering the planned services. Actual requirements will vary, and OA will adjust the staffing and distribution of labor hours within this AWP accordingly to maintain progress toward delivery of the Program.

PLANNED FEE

Fees for providing the planned services are identified in Table 2. This table includes planned personnel, rates, planned labor hours, and estimated fees. In instances where specific personnel have not yet been identified, an assumed hourly rate is included. The table also includes estimated reimbursable expenses. Material changes to the planning represented by this AWP may result in changes to the estimated fees.

KEY ASSUMPTIONS

This AWP is based on assumed Program delivery needs during the period for the AWP. The following key assumptions apply to this AWP:

- The resources and associated level of effort/estimates shown for each task may be adjusted if the scope is modified to assist the district in addressing needs that arise during the Program.
- A revised AWP will be submitted to the Program Manager and approved by November 30, 2024. The revised AWP will specifically cover the period (January through December 2025), will reflect program planning and scheduling completed through November 2025, and will describe anticipated task activities, level of effort, and identified resources commensurate with anticipated program management support service needs.

- The district is currently performing project management for the system component projects. OA is assumed to support district project managers.
- At the direction of the Program Manager, OA can assist the Participants with other activities/projects within the overall Program as required, should that assistance be within the budgetary limits of this AWP or as approved by amendment.
- It is anticipated that work and priorities will change over this AWP period. OA will perform supplemental services as authorized in writing by the Program Manager. OA will not begin any supplemental service until the Program Manager has approved the services, proposed resources/level of effort, and estimated cost and authorized OA to proceed.
- Changes coordinated and approved by the Program Manager, such as re sequencing work within the AWPs will not require changes to the program management Agreement.

APPROVAL

The Program Participants approve this AWP

5/1/2024

Signature and date

J. Clinton Rogers, PE
Vice President
Project Development Leader, Water

2890 E Cottonwood Pkwy, Suite 300
Salt Lake City, UT 84121
Direct: 801-617-3204
Mobile: 801-680-4468
Clint.Rogers@stantec.com

Morgan Drake 5/2/2024

Signature and Date

Morgan Drake
Reuse Program Manager

Washington County Water Conservancy District
533 Waterworks Dr
Saint George, UT 84770
Direct: 435.673.3617
Mobile: 904.236.3303
Morgan@wcwcd.org

Table 1. Year One Planned Owner's Advisor Support Services.

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
Task 1	**OA (Owner Advisor) Leadership**	Augment and enhance Program delivery and implement best practices for disciplined project delivery using your selected PDS (Project Delivery System). Provide Program oversight under direction of the district.	• Establish and conduct regular program review meetings and monthly progress meetings with Program Manager. • Participate in ongoing leadership and management meetings to begin integration and build familiarity with key issues. • Establish team chartering, goals, objectives, constraints, and relationships. • Support Program partners with management of Program implementation as directed by the Program Manager. • Develop a Meeting Matrix that defines the frequency, attendees, and purpose of program meetings. • Develop program workflow policies and procedures, as needed, and implement following submission to and approval by Program partners. • Develop monthly reporting requirements with correlating metrics for comparison and validation. • Manage program resources and ensure necessary technical, management and support resources are available to meet the goals and objectives of the Program. • Participate in Participants' leadership, Board, City Council and Utilities Commission meetings as requested. • Communicate and work with internal and external stakeholders. • Work with Program partners' legal counsel, Program Manager, and other key staff to facilitate completion of various	Program Workflow Policies and Procedures. Monthly invoices and status summaries. Meeting agendas and minutes. Meeting Matrix. Year 1 Safety Plan.

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
			intergovernmental agreements as requested. • Prepare overall safety plan for Year 1 activities.	
Task 2	**System Component Assessment**	Validate and confirm all System components. All components will be assessed to confirm adequate project definition, validated to confirm the basis of cost, delivery methods, and schedule, and to confirm prioritization within the overall Program capital improvement plan (CIP). Evaluate preliminary packaging and delivery method concepts for major components as part of the validation effort during Program Initiation. This will include defining procurement strategies and considering business cases for pre-purchasing materials and equipment. Packaging evaluations will consider contract size and the ability of local and regional contractors to bid and execute the work with an emphasis on engaging local businesses. Following the validation step, each component project will be integrated into the overall Program workplan. This workplan will contain the master schedule and budget against which overall Program performance will be measured. A separate annual Program CIP document focusing on the First Annual (2025) Program Year will be prepared.	• Develop a Summary of the status of design/construction status for each component. • Create and validate the Program Delivery Strategy. • Review existing documentation (strategies, plans, reports) for all System components. • Based on work completed to date, review and evaluate technical, permitting, land acquisition, stakeholder, partnering opportunity, financial, risk, and physical/jurisdictional boundary attributes of Program component projects. • Identify recommended delivery methods (e.g., design-bid-build) for each project or project grouping. • Determine and document the selected approach for each System component. • Develop the initial Delivery Baseline Schedule and anticipated budget. • Summarize information in overall Program Workplan. • Develop Annual CIP for 2025	Program Workplan. Annual CIP for 2025

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
Task 3	**Mobilization/Initiation**			
Task 3.1	**Permitting and Compliance Plan**	Work with the Program partners, the district's environmental counsel, local stakeholders, and agency leadership to complete the NEPA (National Environmental Policy Act) and other permits consistent with ongoing district environmental activities.	• Develop Permitting and Compliance Plan for overall Program Management Plan (PMP). • Build a baseline NEPA/permitting schedule and develop a Regulatory Tracker to track permitting activities. • Identify general data gaps and identify approaches to fill data gaps. • Establish agency communication lines and engage agency management and staff. Develop a strategy to help agencies decide whether to hire a third-party consultant, alternative formulation, evaluation methods, and environmental commitments. • Identify policy, regulatory, technical, and political issues related to environmental issues. • Evaluate which stakeholders need engagement in each permitting phase.	Permitting and Compliance Plan TM
Task 3.2	**Communications Plan**	The project communications plan will foster transparency, trust, and mutual understanding among the partners and all stakeholders, including government entities, private sector partners, community and environmental groups, and the public. The communication plan will establish objectives and stakeholder analysis; provide key messages guidelines to address various stakeholder group interests/concerns; communication channels, including social media and a new section on wcwcd.org (or microsite), and engagement activities at key project milestones; feedback mechanisms; and regular evaluations.	• Facilitate Branding strategy. • Support Program partners' development/refinement of a public outreach and stakeholder engagement strategies and guidelines. • Facilitate a stakeholder mapping process and development and implementation of outreach strategies and timing. • Facilitate development of local business involvement planning. • Support development of landowner engagement strategies. • Support as needed public outreach and public affairs activities.	Communications Plan TM

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
			• Coordinate with all other functional groups with the Program	

Task 3.3	**Program Controls Plan**	The program controls function monitors, forecasts, and reports individual project and overall program performance against cost, schedule, scope, and quality objectives defined within the PMP and annual workplans. We must perform diligent analysis and consistent evaluation of actual cost and schedule performance against the plan to keep the program on track. We will implement a program controls plan under the "no surprises" principle. This plan will provide timely, accurate, comprehensive reports, dashboards, and information, enabling the district to make informed, data-driven decisions quickly and confidently. This plan will be incorporated in the district's PDS.	• Establish Program and Project Work Breakdown Structure (WBS).
			• Set up or validate (as appropriate) document templates – meeting agendas, meeting minutes, PowerPoint, letterhead.
			• Develop the Program Master Schedule and Budget including.
			  ○ Initial schedule templates.
			  ○ Initial Program Master Schedule and Budget with risk analysis.
			  ○ Program Master Schedule and Budget Baseline with risk analysis.
			• Create reporting, dashboard and analytics systems and requirements (permit tracking, property acquisition tracking, outreach and involvement strategy and timing, etc.) and incorporate into PDS.
			• Develop a Program Controls Plan, including document management administration and reserves management.
			• Provide training to Program staff in the use of the systems, tools, and processes.
			• Track budget and expenditures against budget.
				Program Controls Plan TM

Task 3.4	**Resource Management Plan**	Create a resource plan that outlines the roles and responsibilities of each team member, including roles within the Program partners' internal organizations. The resource plan will help the district identify the types, numbers, and timing of staffing resources needed to support program delivery. This includes	• Develop recommended organizational charts, and decision processes and review with Program Manager. • Develop a management authority matrix (responsible, accountable, consulted, and informed, RACI matrix) that defines signature and approval	Resource Management Plan TM

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
		identifying external resource needs. The resource plan will also consider operational readiness to take over operations of new assets and to confirm district staff levels needed to operate and maintain the new facilities.	authority for internal governance-related decisions, including budget, schedule and scope changes, contract authorization and amendments, and external communications. • Validate standard letter and memorandum formats for written communications. • Develop internal communications guidelines.	
Task 3.5	**Design Standards & Project Delivery Guide**	As part of delivery, OA will review the Program partners' existing design criteria, standards, and specifications for System Component design, standard operating procedures, non-standard operating procedures, and emergency response plans. We will prepare fully- integrated design, construction, and O&M requirements.	• Develop design delivery guide TM for PMP. • Review Program partner design standards and revise/develop, as necessary. • Review design criteria, standards, and specifications for System components. • Review and develop standard specifications and details to create uniformity across all Program aspects. • Develop SCADA/I&C standards to fully integrate into the long-term plan for the regional facilities. • CAD (Computer Aided Design)/ Building Information Management (BIM) plan for design and design deliverables to support the district Asset Management (EAM) program. This includes standard tools.	Design Standards and Project Delivery Guide
Task 3.6	**Risk Management**	A thorough risk assessment will be conducted for each component to identify potential risks, which will be compiled into a summary-level program risk register. The risk analysis will identify appropriate responses and help define the needed project and program contingency levels. The risk management plan guidelines define both qualitative and quantitative risk evaluation procedures and the risk management actions that each PM	• Develop risk register templates – one for individual projects (Project–level) and one for the Program (Program–level). • Determine qualitative and quantitative methods for identifying and analyzing project risks in cost and schedule. • Develop project risk responses and mitigation strategies, utilizing and supplementing Program partners' existing information.	Risk matrix. Risk and Value Management Plan. Change Management Plan.

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
		(Project Manager) must take. The Program Controls team will support PMs in implementing the risk management process.	• Develop process to prepare and regularly review project contingency estimates. • Develop a Risk and Value Management Plan. • Develop a Change Management Plan. • Establish a Change Committee.	
Task 3.7	**Quality Assurance**	Proven methods for quality control will be integrated into every task to maintain quality throughout design and construction. OA will review and document comments on design drawings, facility layouts, specifications, technical memoranda, and reports. Designers must adhere to a detailed quality management process, which includes consistent standards, rigorous review, and connection to risk and value management. Each component project will undergo reviews at key points throughout its lifecycle. The integrated team will hold a formal gateway review to approve the project's next phase. Additionally, technical reviews will be conducted at important milestones during the development of the System Component. These reviews will evaluate how the component aligns with the district's objectives for the Regional Reuse System and Program budget. All review comments will be logged, signed off by the designer, and backchecked for incorporation into the design. Designers must provide proof of their quality control activities as part of the project's quality assurance.	• Develop a Quality Management Plan (QMP). • Define quality reviewer roles and responsibilities for the system components. • Define review steps and requirements for individual system component QMPs. • Define guidelines for reviews at design, bidding, and award gateways. • Define review requirements for reviews related to funding agency requirements. • Define review approach for OA activities during the Program.	Quality Management Plan Template

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
Task 3.8	**Procurement Guidelines**	Assist the Program partners in completing preliminary engineering plans and specifications to support the procurement of collaborative delivery methods, including PDB (Progressive Design Build), CM/GC, design-bid-build, and other delivery methods. Prepare scopes of work and procurement documents (announcements, RFQs, RFPs) and will help manage the process. Assist with procuring third-party design services, construction services, and owner-provided equipment and materials should the Program Manager elect.	• Develop a Procurement and Contract Administration Management Plan. • Support the development of invoicing requirements and billing templates. • Support the development of procurement documents (RFQ, RFP, Bidding). • Support the development of professional services and other agreements . •	Procurement Guidelines TM. Procurement documents.
Task 3.9	**Construction Management Plan**	Our construction management and inspection approach is structured to verify that high-quality designs are converted to high-quality facilities. OA will provide a bridge between the design and construction teams to maintain construction progress. Provide construction management oversight, including field and specialty inspections.	• Develop a Construction Management Plan, including procedures for Construction Installation and Materials Testing. • Define Construction Management Roles and Responsibilities. • Define design/pre-procurement procedures addressing issues such as procurement strategy and the constructability review. • Define pre-construction Management procedure, pre-construction phase Notice-to-Proceed (NTP), and key activities prior to construction. • Identify the key contract administration activities to be completed for field inspection and construction management. • Define minimum contractor safety requirements.	Construction Management Plan TM

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
Task 3.10	**Operations Handshake Plan**	Early involvement of operations and maintenance staff in system component planning will result in more efficient facilities and reduce costly changes during construction.	• Meet with operations and maintenance staff at the partner facilities to understand preferences and operational strategies to incorporate into design. • Define roles and responsibilities for operations and maintenance staff in design and construction phases. • Develop outline for Operations and Maintenance Manual. • Develop training outline and schedule requirements for operations and maintenance staff. • Develop startup requirements/operations staff involvement.	Operations Handshake Plan TM
Task 3.11	**Program Management Plan (PMP)**	The PMP will establish a framework for the Regional Reuse System Program. Individual guidelines will be created for each program function. These include permitting and compliance, project delivery, program controls, communications, and construction management. Each task 3.1 – 3.10 will yield a technical memorandum that will become a chapter in the PMP. The PMP will document the Program's project delivery governance structure and critical success factors. The selected project delivery governance model will include stage gates and workflows for these gateways will be configured in the district's chosen PDS to manage and guide the completion of the design and construction of the System components.	• Outline a Program Management Plan (PMP) and compile the Task 3 TMs into the PMP. • The Draft PMP shall be provided to the Program partners for review, and Final PMP shall be provided for approval.	Draft PMP Final PMP The PMP is a living document and may be updated as required over the life of the program.
Task 4	**System Component Support Activities (Works in Progress)**	Several projects in the Program are now ready to bid, award, or start procurement and construction. It is crucial that these	• Prepare RFQs, RFPs, and assist in procurement of design and/or construction services.	Individual deliverables and support of the

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
		projects move forward without any delay to maintain schedules. OA will support early project implementation. The Owner Advisor will provide a full range of expert professional engineering, consulting, and support services on an as-needed basis to assist in Program initiation, planning, analysis, permitting, procurement, design, value engineering, system integration, construction, and post-construction review. Supports identification, planning, and construction of the Regional Reuse System on a schedule that seamlessly integrates with the Program partners' facility plans and complies with regulatory requirements and funding deadlines.	• Aid in planning, developing, and recommending scopes of work for individual component projects. • Assist with negotiating contract price. • Provide gateway reviews - Review and document comments on design drawings, facility layouts, specifications, technical memoranda, and reports. • Submit documents to Reclamation on behalf of the district at project milestones. • Review/provide input for individual project risk registers. • Assist with financial evaluation for works in progress including opinions of probable construction costs (OPCC), invoices, change orders. • Evaluate component project status against goals. • Conduct value engineering analysis for component projects. • Provide construction management oversite including field and specialty inspections. • Participate in progress meetings. • Manage documents for Program. • Support Program Manager land acquisition activities. • Develop a tracking system for issues affecting acquisition of land, rights-of-way (ROWs) and easements. • Review ROW plans and easement descriptions prepared by designers. • If requested by Program partners, meet with property owners to apprise them of the project, provide project status, and work with Program partners to acquire easements.	System Component Projects (see Table 2)

Task No.*	Task/Subtask Name	Summary Objectives	Year 1	Deliverables
			• Support initial environmental permitting activities (e.g., pre-NEPA support, Section 7 support) and ongoing state and federal permitting activities. • Support public/stakeholder outreach. • Support responses to media requests. • Support additional U.S. Bureau of Reclamation funding cycles • Track and manage funding requirements and deadlines. • • Support securing additional outside funding.	
Task 5	**Contingency**	A 10 percent contingency is assumed for tasks as directed by the Program Manager.		As agreed

TABLE 2: 2024 ANNUAL WORKPLAN FEE

	TASK NAME	ACTIVITIES	No	Staff Units	HOURS 2024 Rate Labor Category	1125 $ 307 Team Lead/Program Advisor *Rogers*	153 $ 307 Team Lead/Program Advisor *Schulz*	352 $ 296 Senior Principal *McCandless*	8 $ 296 Senior Principal *McDaniel*	32 $ 296 Senior Principal *Ream*	975 $ 296 Senior Principal *Regan*	40 $ 289 Principal Professional *Broughton*	217 $ 289 Principal Professional *Henderson*	729 $ 289 Principal Professional *Jameson*	400 $ 289 Principal Professional *Thelin*	16 $ 289 Principal Professional *Vanburen*	1147 $ 271 Supervisory Professional *Cowden*	54 $ 271 Supervisory Professional *Doherty*	44 $ 271 Supervisory Professional *Herrera*	345 $ 271 Supervisory Professional *Hjelle*	114 $ 271 Supervisory Professional *Jesionowski*	44 $ 271 Supervisory Professional *Koza*	48 $ 258 Senior Associate Engineer/Designer *Forbes*	42 $ 258 Senior Associate Engineer/Designer *Herrmann*	451 $ 258 Senior Associate Engineer/Designer *Song*	999 $ 258 Senior Associate Engineer/Designer *Winfree*	52 $ 240 Project Associate Engineer/Designer *Brady*	827 $ 240 Project Associate Engineer/Designer *Marshall*
Task 1	**OA Leadership**					**144**	**108**	**0**	**0**	**0**	**164**	**0**	**0**	**108**	**0**	**0**	**132**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**132**
		Kickoff Meeting	1	4		12	12				12			12			12											12
		Monthly Leadership Meetings	8	4		96	96				96			96			96											96
		Coordination with district/Partners	8	1		24					24						24											24
		Contractor Invoice Review	8	4		4					4																	
		Stantec Invoices/Progress Reports				8					28																	
		Printing	8																									
Task 2	**System Component Assessment**					**156**	**4**	**16**	**0**	**0**	**236**	**0**	**0**	**0**	**20**	**0**	**42**	**0**	**16**	**0**	**16**	**0**	**0**	**0**	**0**	**16**	**0**	**128**
		Data Gathering				14					34																	
		Data Review				14					34				4													
		Partner Meetings	3	4		36					36						18											
		Working Group Coordination	2	8		48		16			48				16		24		16		16				16		48
		Draft/Final Program Workplan Development				20	4				60																	80
		Draft/Final 2025 CIP Development				24					24																	
Task 3	**Mobilization/Initiation**					**187**	**41**	**0**	**8**	**32**	**215**	**0**	**217**	**621**	**124**	**16**	**227**	**54**	**28**	**345**	**8**	**12**	**0**	**10**	**451**	**63**	**20**	**67**
Task 3.1	Permitting and Compliance Plan	Workshops	3			8					8						32					8		2			8	
		Working Group Coordination															16					2					4	
		Draft/Final TM Development				4	4				4						60					2		8			8	
Task 3.2	Communications Plan	Workshops	2			4					4						24											
		Working Group Coordination															12											
		Draft/Final TM Development				2	4				2						12											
Task 3.3	Program Controls Plan	Workshops	4			8	0			8	8		4	16						8					11			
		Working Group Coordination				4	0			24	24		8	41			4			24					32			
		Develop SharePoint/Dashboard				4			4		4		30	60						73					60			
		Cost and Schedule Approach				4					8		65	120						80					120			
		Document Management									4		20	40						40					40			
		Coordinate/Integrate Controls Workflow with PDS				4					4		70	148						80					148			
		Draft/Final TM Development				4	4		4		4		20	40			2			40					40			
Task 3.4	Resources Management Plan	Workshops	1	1		3					3			6			3											
		Working Group Coordination	2	1		6					6			10			6											
		Draft/Final TM Development				4	4				4			40														
Task 3.5	Design Standards & Project Delivery Guide	Workshops	2	2		12					12				9		9		4								9	9
		Working Group Coordination	2	2		12					12				9		9		4								9	9
		Draft/Final TM Development				4	4				16																	40
Task 3.6	Risk Management Plan	Workshops	1	2		6					6			6	6		6					4						
		Working Group Coordination	2	2		12					12			12	12		12	16				4						
		Draft/Final Matrix				2	2				2			40			2											
Task 3.7	Quality Management Plan	Workshops	1	2		6					6			6	6	8	6		2								4.5	4.5
		Working Group Coordination	1	2		6					6			6	6	8	6		2								4.5	4.5
		Draft/Final Template Development				4	1							24														
Task 3.8	Procurement Guidelines	Workshops	1	2		6					6				6													
		Working Group Coordination	1	2		6					6				6			6										
		Draft/Final TM Development				2	2				2																	
Task 3.9	Construction Management Plan	Workshops	1	2		6					6				6												6	
		Working Group Coordination	1	2		6					6				6												6	
		Draft/Final TM Development				8	8								24			16										
Task 3.10	Operations Handshake Plan	Workshops	1	2		6					6				6												6	
		Working Group Coordination	1	2		6					6				6												6	
		Draft/Final TM Development				8	4				8				16			16	16								12	
Task 3.11	Draft/Final PMP	Workshops	0	2		0					0			0			0											
		Working Group Coordination	1	2		6					6			6			6											
		Draft/Final PMP Development				4	4				4																	
Task 4	**2024 Early Program Delivery Activities**					**638**	**0**	**336**	**0**	**0**	**360**	**40**	**0**	**0**	**256**	**0**	**746**	**0**	**0**	**0**	**90**	**32**	**48**	**32**	**0**	**920**	**32**	**500**
Task 4.1	Planning/Design Coordination and Review	St. George Reuse Facility Upgrade (Preliminary, 30%, 100% Design)	8	2		48		40																		40		
		SSGRF Onsite Reuse Pond (Preliminary, 30%, 100% Design)	8	2		16		40																		40		
		Pipelines/Forebay from SGRF to Ag Exchange (Preliminary Design)	8	2		16									40													
		Pipeline from Confluence Park WRF to TSWS (100% Design, land acquisition support)	8	2		16									48							48				40		
		Fort Pearce Pond/Basins (Preliminary, 30%, 100% Design)	8	2		16																				40		
		Ash Creek SSD lagoon conversion design				40					40															60		
		Dry Wash Reservoir design				60					60															60		
Task 4.2	Design Completed by OA	IPR Demonstration Facility (Planning/Prelim Design/Design Data)				32		80							24						40					120		100
		IPR Demonstration Facility (30% Design)				46		120							24						50					400		400
Task 4.3	Permitting/Outreach/Funding Support	Environmental Permitting (pre-NEPA support, Section 7, Section 404 support)				20					20						430					32		32			32	
		Public/Stakeholder Outreach Support				80		40			40						260											
		Early Literature Review/PR Support				16		16			16						16											
		Reclamation Funding Support				8						40					40											
Task 4.4	Other Reuse Support	As-needed construction support				120					120				120													
		Warner Valley land exchange				40																						
		La Verkin Secondary System reuse tie-in				24					24															60		
		West Side Treatment Plant				40					40															60		
Task 5	**Contingency**																											
	GRAND TOTAL																											

TABLE 2: 2024 ANNUAL WORKPLAN FEE

	TASK NAME	ACTIVITIES	No	Staff Units	Project Associate Engineer/Designer *Schepis*	Associate Engineer/Designer *Yorgason*	Associate Engineer/Designer *Zimmerman*	Associate Engineer/Designer *Bertoch*	Associate Professional *Topham*	Associate Professional *Saedi*	Project Professional Klingaman	Project Professional EIT	Staff Professional Eltsosie	Staff Professional Admin plcholder	Total Hours	Total Labor Fee	Travel/ Expenses	Subconsultants	TOTAL
		HOURS			80	144	480	280	204	808	1056	914	839	1047	Total Hours				
		2024 Rate			$ 240	$ 230	$ 230	$ 230	$ 205	$ 205	$ 196	$ 196	$ 187	$ 187					
Task 1	**OA Leadership**				**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**172**	960	**$ 256,736.00**	**$ 100,000.00**	**$ -**	**$ 356,736.00**
		Kickoff Meeting	1	4										12	84	$ 22,764.00	$ 10,000.00		$ 32,764.00
		Monthly Leadership Meetings	8	4										96	672	$ 182,112.00	$ 40,000.00		$ 222,112.00
		Coordination with district/Partners	8	1										24	120	$ 31,224.00			$ 31,224.00
		Contractor Invoice Review	8	4										32	40	$ 8,396.00			$ 8,396.00
		Stantec Invoices/Progress Reports												8	44	$ 12,240.00			$ 12,240.00
		Printing	8												0	$ -	$ 50,000.00		$ 50,000.00
Task 2	**System Component Assessment**				**0**	**0**	**0**	**280**	**0**	**80**	**0**	**360**	**360**	**28**	1758	**$ 408,310.00**	**$ 15,328.00**	**$ -**	**$ 423,638.00**
		Data Gathering						120				120	120		408	$ 87,922.00	$ 328.00		$ 88,250.00
		Data Review						160		80		180	180		652	$ 137,658.00			$ 137,658.00
		Partner Meetings	3	4										12	102	$ 28,830.00	$ 5,000.00		$ 33,830.00
		Working Group Coordination	2	8										16	264	$ 72,120.00	$ 10,000.00		$ 82,120.00
		Draft/Final Program Workplan Development										60			224	$ 56,088.00			$ 56,088.00
		Draft/Final 2025 CIP Development											60		108	$ 25,692.00			$ 25,692.00
Task 3	**Mobilization/Initiation**				**20**	**64**	**0**	**0**	**0**	**48**	**236**	**330**	**195**	**441**	4080	**$ 1,026,072.00**	**$ 75,000.00**	**$ 60,900.00**	**$ 1,161,972.00**
Task 3.1	Permitting and Compliance Plan	Workshops	3		8						40		2	2	118	$ 28,608.00	$ 15,000.00		$ 43,608.00
		Working Group Coordination			4						16		2	2	46	$ 10,682.00			$ 10,682.00
		Draft/Final TM Development			8						120		8	4	230	$ 52,110.00			$ 52,110.00
Task 3.2	Communications Plan	Workshops	2								24	2		2	60	$ 14,386.00		$ 21,000.00	$ 35,386.00
		Working Group Coordination									12	2		2	28	$ 6,370.00		$ 8,400.00	$ 14,770.00
		Draft/Final TM Development									24	8		4	56	$ 12,706.00		$ 31,500.00	$ 44,206.00
Task 3.3	Program Controls Plan	Workshops	4											4	67	$ 18,726.00	$ 5,000.00		$ 23,726.00
		Working Group Coordination												16	177	$ 48,433.00	$ 10,000.00		$ 58,433.00
		Develop SharePoint/Dashboard												2	237	$ 65,243.00			$ 65,243.00
		Cost and Schedule Approach												2	399	$ 110,075.00			$ 110,075.00
		Document Management												2	146	$ 40,058.00			$ 40,058.00
		Coordinate/Integrate Controls Workflow with PDS												2	456	$ 125,652.00	$ 10,000.00		$ 135,652.00
		Draft/Final TM Development												4	162	$ 44,614.00			$ 44,614.00
Task 3.4	Resources Management Plan	Workshops	1	1									3	3	21	$ 5,478.00			$ 5,478.00
		Working Group Coordination	2	1									6	6	40	$ 10,378.00			$ 10,378.00
		Draft/Final TM Development													52	$ 15,200.00			$ 15,200.00
Task 3.5	Design Standards & Project Delivery Guide	Workshops	2	2						12		12		12	100	$ 24,898.00	$ 10,000.00		$ 34,898.00
		Working Group Coordination	2	2						12		12		12	100	$ 24,898.00			$ 24,898.00
		Draft/Final TM Development										80		80	224	$ 47,432.00			$ 47,432.00
Task 3.6	Risk Management Plan	Workshops	1	2									6	6	46	$ 12,040.00	$ 5,000.00		$ 17,040.00
		Working Group Coordination	2	2									12	12	104	$ 27,332.00			$ 27,332.00
		Draft/Final Matrix													48	$ 13,922.00			$ 13,922.00
Task 3.7	Quality Management Plan	Workshops	1	2						6		6		6	67	$ 17,335.00	$ 5,000.00		$ 22,335.00
		Working Group Coordination	1	2						6		6		6	67	$ 17,335.00			$ 17,335.00
		Draft/Final Template Development										80		80	189	$ 39,111.00			$ 39,111.00
Task 3.8	Procurement Guidelines	Workshops	1	2						6		6	6	6	42	$ 10,002.00	$ 5,000.00		$ 15,002.00
		Working Group Coordination	1	2						6		6	6	6	48	$ 11,628.00			$ 11,628.00
		Draft/Final TM Development											40	24	70	$ 13,788.00			$ 13,788.00
Task 3.9	Construction Management Plan	Workshops	1	2		6						6	6	6	48	$ 11,700.00	$ 5,000.00		$ 16,700.00
		Working Group Coordination	1	2		6						6	6	6	48	$ 11,700.00			$ 11,700.00
		Draft/Final TM Development				40							40	24	160	$ 37,352.00			$ 37,352.00
Task 3.10	Operations Handshake Plan	Workshops	1	2		6						6	6	6	48	$ 11,700.00	$ 5,000.00		$ 16,700.00
		Working Group Coordination	1	2		6						6	6	6	48	$ 11,700.00			$ 11,700.00
		Draft/Final TM Development											40	40	160	$ 37,404.00			$ 37,404.00
Task 3.11	Draft/Final PMP	Workshops	0	2								0		0	0	$ -			$ -
		Working Group Coordination	1	2								6		6	36	$ 9,276.00			$ 9,276.00
		Draft/Final PMP Development										80		40	132	$ 26,800.00			$ 26,800.00
Task 4	**2024 Early Program Delivery Activities**				**60**	**80**	**480**	**0**	**204**	**680**	**820**	**224**	**284**	**406**	7268	**$ 1,766,408.00**	**$ 20,150.00**	**$ 157,500.00**	**$ 1,944,058.00**
Task 4.1	Planning/Design Coordination and Review	St. George Reuse Facility Upgrade (Preliminary, 30%, 100% Design)	8	2									40	24	192	$ 48,864.00	$ 1,550.00		$ 50,414.00
		SSGRF Onsite Reuse Pond (Preliminary, 30%, 100% Design)	8	2									40	24	160	$ 39,040.00	$ 1,550.00		$ 40,590.00
		Pipelines/Forebay from SGRF to Ag Exchange (Preliminary Design)	8	2									40	24	120	$ 28,440.00	$ 1,550.00		$ 29,990.00
		Pipeline from Confluence Park WRF to TSWS (100% Design, land acquisition support)	8	2									40	24	216	$ 53,456.00	$ 1,550.00		$ 55,006.00
		Fort Pearce Pond/Basins (Preliminary, 30%, 100% Design)	8	2									40	24	120	$ 27,200.00	$ 1,550.00		$ 28,750.00
		Ash Creek SSD lagoon conversion design							24			24		24	212	$ 53,712.00	$ 1,550.00		$ 55,262.00
		Dry Wash Reservoir design							24			24		24	252	$ 65,772.00	$ 1,550.00		$ 67,322.00
Task 4.2	Design Completed by OA	IPR Demonstration Facility (Planning/Prelim Design/Design Data)								220		16		4	636	$ 155,224.00	$ 1,550.00		$ 156,774.00
		IPR Demonstration Facility (30% Design)								340		40		10	1430	$ 348,738.00	$ 1,550.00		$ 350,288.00
Task 4.3	Permitting/Outreach/Funding Support	Environmental Permitting (pre-NEPA support, Section 7, Section 404 support)			60		400		60		640		60	80	1866	$ 423,518.00			$ 423,518.00
		Public/Stakeholder Outreach Support					80				140		20	20	680	$ 172,020.00	$ 1,550.00	$ 157,500.00	$ 331,070.00
		Early Literature Review/PR Support								120					184	$ 43,320.00	$ -		$ 43,320.00
		Reclamation Funding Support									40		4	4	136	$ 34,192.00			$ 34,192.00
Task 4.4	Other Reuse Support	As-needed construction support				80			48			48		48	584	$ 153,664.00	$ 3,100.00		$ 156,764.00
		Warner Valley land exchange										24		24	88	$ 21,472.00			$ 21,472.00
		La Verkin Secondary System reuse tie-in							24			24		24	180	$ 44,064.00			$ 44,064.00
		West Side Treatment Plant							24			24		24	212	$ 53,712.00	$ 1,550.00		$ 55,262.00
Task 5	**Contingency**																		**$ 403,096.00**
	GRAND TOTAL														**14,066**	**$ 3,457,526.00**	**$ 210,478.00**	**$ 218,400.00**	**$ 4,289,500.00**

Procurement Memo

To Zachary Renstrom, General Manager

From Trinity Stout, Project Manager

Date April 30, 2024

Subject Procurement of Engineering Services

Type of Procurement: Design Professional Procurement for Engineering Services

Item Description: Engineering Services to provide a Preliminary Design Report and Design Engineering Guidelines for the conveyance components of the Regional Reuse System.

Reason for Procurement: The Regional Reuse Program of the Washington County Water Conservancy District (district) needs to procure this service as one of the critical first steps in delivering the Regional Reuse System. The Preliminary Design Report will include alignment studies for the various pipeline segments, material recommendations, and initial design and sizing for the different forebays. Design Engineering Guidelines will be developed in order to streamline all future design on the conveyance components. Also included in the project is the alignment study for the Quail Creek Pipeline, as it follows a similar alignment as one segment of reuse pipeline.

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

1. Bowen Collins & Associates: This design professional was determined to best meet the needs of the district because of their extensive experience with complex alignment studies and their familiarity with various municipalities and the overall reuse plan. A satisfactory contract was negotiated with this design professional at a price fair and reasonable to the district.

2. Barr Engineering: This design professional did not score as high as the successful design professional.

3. Alpha 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.

Purchase Amount: $1,405,245

Contract Type(s): Fixed Price

Accounting Code: 65-4620-300

Approved:

_____

Zachary Renstrom, General Manager

AGREEMENT
(Regional Reuse System Preliminary Design Report and Design Engineering Guidelines)

This Agreement is made and entered into effective on the 6 day of May, 2024, by and between the Washington County Water Conservancy District, a political subdivision of the State of Utah ("District"), and Bowen Collins & Associates ("Engineer"), a Utah corporation.

RECITALS

WHEREAS, the District desires to engage an engineer to provide engineering services for the Regional Reuse System Preliminary Design Report and Design Engineering Guidelines; and

WHEREAS, the Engineer has submitted a statement of qualifications and has been selected to perform engineering services for the District as more fully set forth in its Proposed Scope of Work, a copy of which is attached as Exhibit A.

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

SPECIFIC TERMS

1. Scope of Work.

The Engineer will perform the services described in the Proposed Scope of Work (Exhibit A) in consultation with the District and others whom the District may identify from time to time.

2. Payment.

The District shall pay the Engineer in accordance with the Fee Proposal, included in Exhibit A, pursuant to monthly invoices submitted by the Engineer. The Engineer will only invoice actual accrued costs. The District will remit payment to the Engineer 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 Engineer 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 Engineer, the work is not satisfactory to the District or if the work falls behind schedule, which amount(s) withheld will be disbursed to the Engineer within 30 days of the Engineer

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 Engineer shall submit an addendum to be approved in advance of the applicable specified deadline set forth below.

3. 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. Compliance with other contracts. The Engineer 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.

3. 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.

4. Independent Contractor. Both parties hereto agree that the Engineer 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 Engineer 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 Engineer by the District. The Engineer 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 Engineer.

5. Subcontracts. The Engineer 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. Presently approved subcontractors associated with this project include those listed as the Project Team in the Proposed Scope of Work (Exhibit A). When authority to subcontract is granted, the Engineer 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 Engineer referred to herein. The Engineer is responsible for contract performance whether or not subcontractors are used. The Engineer shall submit the name of each subcontractor which the Engineer 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. Ownership of Information. Title to all reports, information, data, computer data elements, and software prepared by the Engineer in performance of this Agreement shall vest in the District. The Engineer 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. Subject to applicable State and Federal laws, regulations, the District shall have full and complete rights to reproduce, duplicate, disclose, and otherwise use all such information.

7. Confidentiality of Records. The Engineer shall establish, maintain, and practice procedures and controls that are acceptable to the District for the purpose of assuring that no information contained in the Engineer'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 Engineer 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 Engineer to disclose information other than as is set forth in this section, prior to doing so, the Engineer shall apply to the District for written permission to make such disclosure.

8. Record Keeping, Audits, and Inspections. The Engineer and any Subconsultants shall maintain financial and operation records in sufficient detail to document all transactions relating to the disbursement of contract funds and shall make available for audit and inspection all such records relating to contract services, requirements, and expenditures until all audits initiated by State and Federal auditors are completed, for a period of five (5) years from the date of termination of this Agreement or for such period as is required by any other paragraph of this Agreement, whichever is longer. Records which relate to disputes, litigation, or the settlement of claims arising out of the performance of this Agreement, or to cost and expenses of this Agreement as to which exception has been taken by the District, shall be retained by the Engineer until disposition has been made of such disputes, litigation, claims, or exceptions.

9. Sales Tax Exemption. The District's sales and use tax exemption number is 12562246-002-STC. The tangible personal property or services being purchased are being paid from public funds and used in the exercise of the District's essential functions. If the items being purchased are construction materials, they will be converted into real property by employees of this or another government entity, unless otherwise expressly stated in the Agreement.

10. Recitals. The Recitals contained in this Agreement are incorporated into the Agreement.

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. 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.

13. Authorization. Each individual executing this Agreement does represent and warrant to each other so 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.

14. 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.

15. 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 District Court of the State of Utah.

16. Inducement. The making and execution of this Agreement has not been induced by any representation, statement, warranty, or agreement other than those herein expressed.

17. 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.

18. 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.

19. 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.

20. 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:

a. The remainder of this Agreement shall be considered valid and operative, and,
b. Effect shall be given to the intent manifested by the portion held invalid or inoperative.

21. 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.

22. 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 third party 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.

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

24. Boycott Restrictions. Pursuant to Utah Code Annotated Section 63G-27-201, Engineer certifies that it is not currently engaged in a boycott of the State of Israel or an economic boycott. Engineer agrees not to engage in a boycott of the State of Israel for the duration of this Agreement. Engineer agrees to notify the District in writing if it begins engaging in an economic boycott.

25. Equal Opportunity Clause. The Engineer agrees to 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, disabilities, or other legally protected category. Also, the Engineer agrees to abide by any law or executive order that prohibits sexual harassment in the workplace.

26. Binding on successors in interest. This Agreement shall bind the parties hereto and their successors, heirs, assigns and representatives, and the obligations of the parties shall not merge with any document of title.

27. Assignment. No rights or obligations of the Engineer 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 Engineer's becoming insolvent, or filing proceedings in bankruptcy or reorganization under Title XI, United States Code.

28. Indemnification. Pursuant to Utah Code Annotated Section 63G-6a-1203, the Engineer agrees to indemnify, save harmless, and release the District and all its officers, agents, volunteers, and employees from and against 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 caused by, resulting from, or incurred due to the Engineer's breach of contract, negligence, recklessness, or intentional misconduct, or the negligence of the Engineer's subcontractor. 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.

29. 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 Engineer, as the case may be, when deposited in the United States mail, certified or registered, postage prepaid, addressed as follows:

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT
ATTN. ZACHARY RENSTROM
533 EAST WATERWORKS DRIVE
ST. GEORGE, UTAH 84770

BOWEN COLLINS & ASSOCIATES
ATTN. TODD OLSEN, P.E.
20 NORTH MAIN, SUITE 107
ST. GEORGE, UTAH 84770

30. Term. This Agreement shall terminate without further action of any party when all of the terms hereof shall have been fully performed.

31. Termination. This Agreement may be terminated with cause by either party, in advance of the specified termination date, upon written notice being given to the other party. The party in violation will be given ten (10) working days after notification to correct and cease the violations, after which the Agreement may be terminated for cause. Such termination is to be without prejudice to any claim for damages or other remedy for such breach. On termination of this Agreement, all accounts and payments will be processed according to the financial arrangements set forth herein for approved services rendered to date of termination.

32. 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.

33. 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.

34. 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.

35. Sovereign Immunity. Nothing in this Agreement shall be construed to waive the sovereign immunity of the District.

36. Exhibit. The following exhibits attached hereto are incorporated herein by this reference. If there is any conflict or inconsistency between the terms of this Agreement and the Exhibits, this Agreement governs.

Exhibit A: Proposed Scope of Work, including Fee Proposal, dated APRIL 30, 2024

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

BOWEN COLLINS & ASSOCIATES

By: _____
Todd Olsen, P.E., Project Manager

BOWEN COLLINS
& ASSOCIATES

20 NORTH MAIN, SUITE 107 • ST. GEORGE, UTAH 84770
TEL: 435.656.3299

April 30, 2024

Trinity Stout, P.E.
Project Manager
Washington County Water Conservancy District
533 East Waterworks Drive
St. George, Utah 84770
Sent via email: trinity@wcwcd.org

Subject: Proposed Scope of Services, Schedule, and Fee for Engineering Services for the Regional Reuse System Preliminary Design Report and Design Engineering Guidelines

Dear Trinity:

The Washington County Water Conservancy District (WCWCD/district) has selected Bowen Collins & Associates (BC&A) to provide engineering services for the Regional Reuse System Preliminary Design Report and Design Engineering Guidelines (DEGs). This scope of services and associated fee are based on our information regarding the Regional Reuse Master Plan, the district's request for statement of qualifications, and previous scoping meetings with the district.

We propose to complete the following tasks to accomplish the district's objectives for the project.

SCOPE OF SERVICES

TASK 1.0: PROJECT MANAGEMENT AND MEETINGS

- A kick-off meeting will be held with all project participants to initiate and facilitate project communication and begin the development and refinement of project assumptions and criteria (see Task 2). We will also review the BC&A team's initial idea concerning project alternatives.
- Subsequent project team meetings will be held on a bi-weekly basis throughout the course of the project with district staff and the Owner Advisor (OA).
- Technical team meetings will be held at critical junctures to communicate technical issues and adjust the direction of the individual technical investigation.
- Monthly coordination meetings will be held with project stakeholders to discuss the findings and direction of the study and to receive input and direction on study assumptions.
- Review meetings will be held after each submittal (i.e. technical memorandum or report) to receive review comments.
- BC&A will provide meeting agendas and associated meeting minutes for each meeting or workshop.
- BC&A will also manage the project including invoicing, reviewing subconsultant invoices, and miscellaneous management tasks.

TASK 2.0: DEVELOP PROJECT ASSUMPTIONS AND DESIGN CRITERIA

The following subtasks will be completed:

1. **Project Definition Workshop** – The first task is to meet with the district and other primary stakeholders to conduct a brief, but comprehensive effort to develop and refine the key project assumptions and criteria. The project's key objectives and alignment evaluation criteria will be developed in this meeting, with the key purpose of identifying what are the most important issues to the district (for example: cost, conflict avoidance, hydraulic/operations, etc.). Establishing project objectives and criteria is an important step in documenting the path towards selecting a final alignment. This effort will also include defining the following:
    a. Key Points of Connection – We have assumed that there are five main connection points:
        1) Saint George City WRF
        2) Fort Pierce Wash Reservoir
        3) Warner Valley Reservoir
        4) Ash Creek WRF
        5) Hurricane City Connection
        6) Other – Quail Creek Reservoir and Saint George City Connection
    b. Distinct Project Pipeline Reaches – As part of this subtask, we will identify clear delineations between pipeline reaches so that smaller pieces of the project can be evaluated in the routing analyses. These delineations may be made either by connection points or by pipe diameter or by other reasonable project delineators. We have assumed that there will be about four project reaches between those points, with two potential additional reaches to be evaluated in tandem with the others: 1) Quail Creek Pipeline and 2) Warner Valley Reservoir deliveries to Saint George City.
    c. Study Areas for Each Reach – Determine the area to be studied for potential pipeline alignments.
    d. Define Preferred Corridors in Each Reach – Define corridors in each reach that may be favorable to the stakeholders. These are to be included as shortlist alignments for further study.
    e. Future Delivery Points or Reservoirs and System Operational Considerations
    f. Challenging Areas
    g. Conservation Areas or View Sheds
    h. Public/Private Lands – involvement tolerance with federal agencies
    i. Eminent Domain Potential – would the District implement?
    j. Political Issues
    k. Other Issues – Anything that may hinder or help the alignment study approach.
2. **Review Alignment Study Approach** - We will then fine-tune and finalize the alignment study approach if needed after this meeting.

3. **Pipeline Baseline and Hydraulic Criteria** - We will work with the district to develop baseline criteria for pipeline diameter(s), material, velocity limits, pressure ratings, pump station hydraulics, and basic installation cost conditions to be used in the evaluation. These criteria can each be modified further in the development of the predesign and Design Engineering Guidelines (DEGs) portion of the project.

TASK 3.0: DATA COLLECTION AND REVIEW

The pipeline alignment evaluation requires a great deal of data collection and synthesis. BC&A's approach to pipeline routing involves collecting, cleaning, and storing all relevant project data in a geodatabase to facilitate spatial analysis within the defined study area. We will work with both stakeholders and other government agencies to obtain all additional information needed to evaluate feasible pipeline alignments including the information listed below. We will leverage this data to assist in the alignment evaluation, using GIS and engineering tools to understand the construction cost impacts and the non-cost impacts within the corridor options. The following data will be collected and analyzed to help identify the preferred pipeline alignment based on the project design criteria and objectives established in Task 2.0:

- LiDAR and topo data
- Existing utilities
- Transportation plans
- Conservation areas – protected lands, preserves, parks, etc.
- Riparian areas and wetlands
- Habitat protection areas
- Endangered species areas
- Flood zones
- Previous operational modeling
- Water quality goals and monitoring results
- Threatened/endangered species
- Geologic maps
- WCWCD master planning documents
- Land ownership
- Parcel Land Information Records (LIR) data

TASK 4.0: ALIGNMENT STUDY

The proposed methodology used to determine the most favorable alignment alternative relies on network analysis tools that are based on construction cost factors applied to the pipeline to identify the least-cost alignment. The goal of this approach is to provide robust, unbiased, and defensible study results. Our proposed alignment study approach is described in the subtasks below. Each of these subtasks will be evaluated for each reach of the alignment study.

Task 4.1: Identify Fatal Flaws and Feasible Corridors

The purpose of this task is to identify fatal flaws and areas with serious issues, along with identifying favorable corridors for further evaluation, using the criteria and objectives established in the previous tasks. Establishing the initial feasibility of potential corridors is critical to constructing a network used to determine favorable pipeline alignment options. We will identify the following throughout the study area and plan a workshop to discuss and verify findings with the district and OA:

- Fatal flaws and "no-go" areas. These areas will not be included in the routing analysis as they are not deemed viable options.
- Areas with potentially negative issues. These areas will be included in the analysis for comparison with the most favorable alignments.
- Areas with positive benefits. These areas are most likely to provide a favorable pipeline corridor and will be of special interest in the analysis approach. These areas may be added to the Task 2.0 initial shortlist of alignments for each reach.

Task 4.2: Construct a Network of Feasible Alignments and Define Preliminary Shortlist

Task 4.2 involves the development of a routing network composed of interconnected pipeline routes that reasonably represent the feasible routes within the various corridors. This network will be set up for each reach, and will have sufficient connectivity to allow robust, least-cost pathfinding algorithms to explore many different feasible routes. Once the network is set up, multiple pipelines and multiple reaches can be evaluated simultaneously.

For each reach we will conduct one- to three-day field investigations where necessary to ground-truth the data and provide additional documentation of the pipeline corridor options. These field days will be looking at physical features such as geologic hazards, bedrock impacts, riparian areas, wetlands, and other issues that may impact project costs. The scope includes some field time by the team geologist and, where access is limited, drone flights to improve understanding of the ground conditions.

Task 4.3: Define and Apply Cost Factors for Routing Analysis

The purpose of this task is to develop the pipeline installation cost factors that are added to a base pipeline installation cost. The base pipeline cost includes only pipe materials and base installation costs (construction through undeveloped land, no utilities, no difficult construction). This base pipeline cost is developed as part of the project design criteria developed in Task 2.0. Construction cost factors are applied to this base cost to reflect the appropriate scaling up of estimated construction cost associated with pipeline construction in various conditions, such as bedrock trenching, high utilities areas, surface finish, etc. We will utilize our team's construction cost experts to help develop cost factors for specialized pipeline construction such as steep slopes, hard rock excavation, or high groundwater. The project criteria and other potential challenges will define cost factors for other components of pipeline installation, such as permitting costs, land/easement acquisition, wetland mitigation, etc. where applicable.

The next step is to utilize the digitized GIS data (collected in Tasks 2.0 and 3.0) to apply each unique cost factor combination to that geographic location. The unique combinations are then overlaid on the routing network to split each segment in the network, apply the individual cost factor, and then

compute and aggregate weighting on each pipeline segment (high utilities cost + surface finish + etc.). High-cost factors may not initially disqualify a route, but the route will be less preferred by the network routing algorithms and may be screened out with strong mathematical support in favor of a better choice for the district.

Task 4.4: Develop and Evaluate a Shortlist of Preferred Alternatives

This task involves running the routing analysis algorithms, benchmarking performance of the preliminary shortlists of alternatives developed in Task 4.2 from endpoint to endpoint and within individual reaches, then developing a computed list of least cost alignments to be compared with the initially selected short-list of alignments. The updated shortlists will be reviewed with the district and key stakeholders to obtain input and comments, then revised if necessary. Both preliminary design report (PDR) documents will clearly document how non-feasible, sub-optimal, and costly pipeline alignments were screened out of further consideration in favor of the short-list alignments, creating a highly defensible path to the final selection of a preferred corridor for each conveyance facility.

Task 4.5: Perform Sensitivity Analysis and Refine Alternatives Shortlist

BC&A will utilize custom tools to perform sensitivity analyses on the routing analysis results in two major ways:

1. Utilize the tools to rapidly indicate how much of a cost increase the district should expect from deviating from a preferred alignment. If non-cost factors introduce a challenge to the preferred alignment, the district will know how the challenge could impact their alignment in terms of scope and cost.
2. Utilize the tools to investigate how slight variations in cost factors (for example, utility density) can influence the algorithms' choice of optimal alignment. In cases where no change in alignment occurs, these slight variations help define a swath of area or corridor of minimal cost increase, which gives the district flexibility in the final design to make slight adjustments to the pipeline alignment as needed. If the slight variations do cause significant differences in the algorithms' choice of optimal alignment, it indicates a higher risk that future changes to the conditions associated with that cost factor changes the preferred alignment. This approach similarly can screen out alternatives with significant risk of changing future conditions that could alter the choice of alignment, which in turn saves time and cost in the future by avoiding such changes.

The sensitivity analysis will be used as a valuable tool during public outreach, negotiation with other stakeholders or permitting agencies, allowing the district to know which sections of the alignment are generally equivalent to one another and could be readily changed with minimal cost impacts. These tools also identify critical path areas in terms of corridor preservation, permitting, etc.

Task 4.6: Engineering Evaluation and Costing of Shortlist Project Facilities

We will run hydraulic analyses on each of the final shortlist of alignment alternatives considered by reach, which will include hydraulic profiles, major pipeline appurtenances (PRVs, pump horsepower, etc.), design flow rates, and other pertinent hydraulic information. We will identify any significant hydraulic differences between alternatives and prepare a preliminary opinion of probable cost for each based on our results. Finally, we will conduct a final combined evaluation that considers cost and non-cost criteria to recommend the final preferred pipeline alignments. We will work closely

with the district and other key stakeholders to review the initial recommendations and make necessary adjustments if needed. We will document the approach, results, and recommendations in the final preliminary design report (PDR) documents.

TASK 5.0: PRELIMINARY DESIGN REPORT – REGIONAL REUSE SYSTEM

The BC&A team will document the alignment studies and engineering evaluations in the PDR. The PDR will document the assumptions, analyses, conclusions, and future plans for the development of the project. The primary elements of the document will include the following:

- *Alignment Study and Recommendations.* The PDR will document the steps undertaken to analyze, develop, and refine the preferred pipeline alignments. The BC&A team will provide a final alternatives map with key facilities and preliminary design of project facilities. Critical parcels and landowners will also be identified, with recommendations for land acquisition.
- *Engineering Evaluation.* The PDR will document the engineering and hydraulic studies conducted and identify the recommended major project facilities for the recommended pipeline alignment. The engineering items evaluated will be at a minimum: conveyance components and appurtenances; hydraulic analysis and conveyance capacities; pipeline material evaluations; pumping systems; sizing of storage systems; SCADA integration recommendations; geotechnical recommendations; and geological hazards. Preliminary operational scenarios of the Regional Reuse System will also be incorporated into the preliminary design. Design criteria and sizing for all the major facilities and specific design recommendations will also be included in this section of the PDR.
- *Project Cost.* The PDR will present the Class 4 (20% low to +30% high) preliminary opinion of construction cost for the preferred pipeline alignments and associated conveyance and storage facilities.
- *Environmental Evaluation and Plan.* The PDR will document the project's preliminary purpose and need, and the reviews conducted for each resource. It will also present potential permitting requirements and right-of- way needs to coordinate with the OA. The PDR will identify each of the anticipated next steps in the project development.
- *Conceptual Level Design Drawings.* Conceptual level design drawings will be provided for the critical aspects of the project and to document preliminary design decisions, including:
    - Conceptual level drawings for pump stations (site plan, mechanical plan and profile views, preliminary structural design, SCADA strategy, and power requirements)
    - Conceptual level drawings for settling/storage ponds (site plan, reservoir profile)
    - Conceptual level drawings for pipelines (pipeline alignments, hydraulic profiles, property lines, easements, pipeline appurtenances)
        - Generally plan views only, 1000 feet per sheet
        - Additional detail (plan and profile and/or higher resolution) at critical locations and crossings

The draft report will be provided in electronic format for district and stakeholder review. BC&A's team will also conduct a meeting to present the results of the engineering evaluation and to receive comments on the draft report. Once the requested changes and comments have been incorporated into the report, the PDR will be finalized and provided in electronic format. BC&A will also submit a draft copy of the PDR to the Bureau of Reclamation and will review and incorporate their comments.

TASK 6.0: PRELIMINARY DESIGN REPORT – QUAIL CREEK PIPELINE

The analysis of the Quail Creek Pipeline requested by the district will follow the same approach as outlined in the tasks above and be analyzed concurrently with the rest of the Regional Reuse System. We will identify probable conflicts between preferred pipeline alignments. Given the condensed study area for the Quail Creek Pipeline, additional connectivity and routing options will be constructed in the routing network used during the analysis. We will similarly describe alignment alternatives, provide an engineering evaluation, estimate project cost, document the preliminary environmental evaluation and plan, and include conceptual level (mapping grade) design drawings. Finally, we will likewise provide the PDR in electronic format for district and stakeholder review, conduct a review meeting, and provide a final electronic version after addressing comments.

TASK 7.0: DESIGN ENGINEERING GUIDELINES

The BC&A team will develop a complete set of Design Engineering Guidelines (DEGs) for the district to be utilized in the design of the Regional Reuse System Projects. Solid DEGs provide direction for the design of each of the projects and ensures consistency even when multiple consultants are working on the project. The DEGs that we recommend for this project include CAD standards, standard details, and standard specifications as follows:

- *DEG – 01: General Design Guidelines.* This will include administrative guidelines, project control guidelines, cost estimating guidelines, QA/QC program guidelines, word processing guidelines, drafting standards and CAD guidelines, bid phase guidelines, construction phase assistance coordinated with the district's selected project delivery system, operation and maintenance manual guidelines, and specification guidelines.
- *DEG – 02: Pump Station Guidelines.* This will include guidelines for permits, utility coordination, code conformance, station hydraulics, selection of main pumping units, pump arrangement and spacing, header layout, efficiency, expandability, standby pumps and equipment, pump inlet configuration, transient analyses and mitigation measures, piping and valves, surge control systems, overhead hoist, support systems, HVAC, pump station electrical systems, architecture, and instrumentation and control systems.
- *DEG – 03: Pipeline Design Guidelines.* This will include guidelines for pipeline design and CAD standards, utility coordination, traffic control and temporary access, special crossings, corrosion protection, pipeline systems, hydraulic design, protective coatings and linings, appurtenances and structures, hydraulic and surge analysis, pressure testing, pipe handling, bedding, backfill, and thrust restraint.
- *DEG – 04: Instrumentation and Control Design Guidelines.* This will include guidelines for process and instrumentation diagrams, instrumentation, input/output, control panels, programmable logic controllers, human machine interface, power and UPS, communications, and control system architecture.

TASK ADD 1.0: GEOTECHNICAL FIELD INVESTIGATION

This task includes an additive alternative to complete a geotechnical site investigation for the reservoir sites to be performed as part of the preliminary design. The recommendation is to perform two to three geotechnical borings and excavate approximately eight test pits at each of the reservoir sites. Laboratory testing will be performed on selected samples obtained during field investigation. The information obtained from the borings and test pits will be used to evaluate foundation

conditions and potential borrow materials. This investigation will also remove potential variability from the preliminary design and associated cost estimating. Also, this geotechnical site investigation and data could be used in the future final design phase.

PROJECT TEAM

To complete these objectives, we propose using the team listed in our Statement of Qualifications including:

Project Manager: Todd Olsen, P.E. (primary contact)

Senior Review, QA/QC, and Principal-in-Charge: Jason Luettinger, P.E.

Senior Project Engineer: Thayne Clark, P.E.

Project Engineer Hydraulics & Pump Stations: Aaron Anderson, P.E.

Project Engineer Alignment Study: Cody Moultrie, P.E.

Staff Engineer: Josh Ward, EIT

Staff Engineer: Carson Goodrich, EIT

Permitting: Jamie Tsandes, PLA

Constructability/Cost Estimating; Judd Hamson, Whitaker Construction

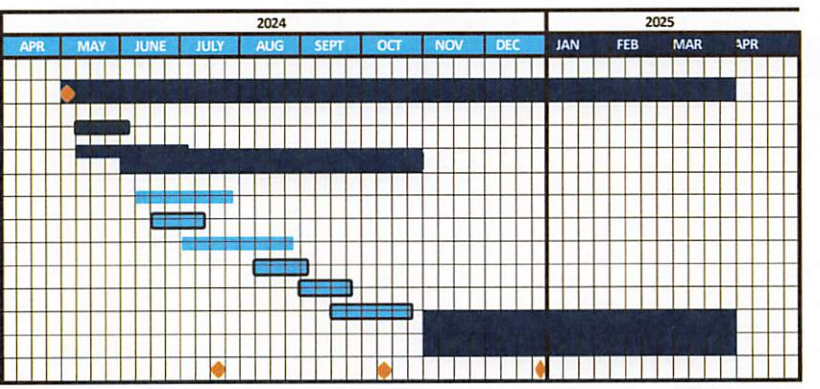
Geotechnical Engineer: Brandon Horrocks, P.E., RB&G

SCADA/I&C: Keith Christensen, Automation and Controls

PROJECT SCHEDULE

We have prepared a detailed schedule based on our experience with similar projects and our proposed approach. We anticipate the Notice to Proceed to be May 7, 2024 and the project will take approximately 11 months to complete.

TASK	Item	Duration (Wks.)
	Estimated Notice to Proceed (May 7, 2024)	
1.0	Project Management	44
2.0	Develop Project Assumptions and Design Criteria	4
3.0	Data Collection and Review	8
4.0	Alignment Study	20
	4.1: Identify Fatal Flaws and Feasible Corridors	*7*
	4.2: Construct a Network of Feasible Alignments	*4*
	4.3: Define and Apply Cost Factors for Routing Analysis	*8*
	4.4: Develop and Evaluate a Short-List of Alternatives	*4*
	4.5: Perform Sensitivity Analysis of Network Routing Results	*4*
	4.6: Engineering Evaluation of Short-List Project Facilities	*6*
5.0	Preliminary Design Report - Regional Reuse System	20
6.0	Preliminary Design Report - Quail Creek Pipeline	20
7.0	Design Engineering Guidelines	44



FEE ESTIMATE

We have tabulated estimated man-hours and costs to complete each task outlined in the previously defined scope of services. As presented in Exhibit A, we propose to complete the above outlined scope of services on a cost reimbursable basis, with a total fee not to exceed $1,299,366. We have recommended an additional task to complete geotechnical site investigation at each of the reservoirs. The additional cost for this field investigation is $105,878 as noted in Exhibit A for a total cost of $1,405,245.

We are willing to negotiate the scope of services and associated fee if there is something in this proposal that does not meet your needs. We enjoy working with the district and look forward to working with you on this critical project. We are available to start work immediately. Please call if you have any questions or if you need additional information.

Sincerely,
Bowen Collins & Associates, Inc.

Todd Olsen, P.E.
Project Manager

Attachment

EXHIBIT A

Regional Reuse System Preliminary Design Report and DEGs

Washington County Water Conservancy District

Engineering Man-hours and Fee Estimate

4/30/2024

		Office		Engineers									Subtotal Hours	Subtotal Labor	Subtotal Expenses	Mileage	Geotech	Construct	SCADA	Total Cost
	Labor Category	Account	Editor	Enviro.	EE	EIT	EIT	PE	PE	PE	PM	PIC								
	Staff	Snow	Hilbert	Tsandes	Youngstrom	Goodrich	Ward	Moultrie	Anderson	Clark	Olsen	Luettinger								
Task	**Task Description**																			
TASK - PRELIMINARY DESIGN																				
1.0	Project Management and Meetings	1		16	18	39	49	106	30	86	238	30	613	$ 121,175	$ 68,117	*$ 1,350*	*$ 38,475*	*$ 9,240*	*$ 19,052*	$ 189,292
2.0	Develop Project Assumptions and Design Criteria			8	4	25	22	9	28	33	30	7	166	$ 30,910	$ 6,105		*$ 6,105*			$ 37,015
3.0	Data Collection and Review	1		4		86	10	58	12	8	35	4	218	$ 35,877	$ 9,831		*$ 7,191*	*$ 2,640*		$ 45,708
4.0	Alignment Study																			
4.1	*Reach 1 - SG WRF to Ft Pierce Res*			10		145	165	85	10	69	27	2	513	$ 82,823	$ 8,658	*$ 180*	*$ 7,191*	*$ 1,287*		$ 91,481
4.2	*Reach 2 - Ft Pierce Res to Warner Valley Res*			10		145	160	85	10	59	25	2	496	$ 79,382	$ 8,980	*$ 503*	*$ 7,191*	*$ 1,287*		$ 88,362
4.3	*Reach 3 - Warner Valley Res to Ash Creek WRF*			10		130	150	80	10	59	25	2	466	$ 75,137	$ 9,003	*$ 525*	*$ 7,191*	*$ 1,287*		$ 84,140
4.4	*Reach 4 - Ash Creek WRF to Hurricane*			10		130	150	80	10	59	25	2	466	$ 75,137	$ 9,003	*$ 525*	*$ 7,191*	*$ 1,287*		$ 84,140
4.5	*Reach 5 - Warner Valley Res to SG*			2		44	59	30	3	19	7	0	164	$ 26,072	$ 4,882		*$ 3,595*	*$ 1,287*		$ 30,954
4.6	*Reach 6 - Hurricane to Quail Creek Res (Pipeline Replacement)*			2		44	59	30	3	19	7	0	164	$ 26,072	$ 4,882		*$ 3,595*	*$ 1,287*		$ 30,954
5.0	Preliminary Design Report - Regional Reuse System	1	10	134	52	1154	90	500	50	70	76	0	2137	$ 328,779	$ 81,224		*$ 38,632*	*$ 1,650*	*$ 40,942*	$ 410,003
6.0	Preliminary Design Report - Quail Creek Pipeline		10	43	0	306	20	93	25	25	30	0	552	$ 84,637	$ 1,220			*$ 1,220*		$ 85,857
7.0	Design Engineering Guidelines	1	27		16	15	0	72	17	36	45	6	235	$ 43,273	$ 78,188		*$ 2,948*	*$ 1,320*	*$ 73,920*	$ 121,461
	TOTAL HOURS	***4***	***47***	***249***	***90***	***2,263***	***934***	***1,228***	***208***	***542***	***570***	***55***	***6,190***							
	TOTAL COST NOT TO EXCEED													**$ 1,009,274**	**$ 290,092**	**$ 3,083**	**$ 129,304**	**$ 23,792**	**$ 133,914**	**$ 1,299,366**
																			Task ADD 1.0: Geotechnical Field Investigation	$ 105,878
																			TOTAL WITH ADD 1.0:	**$ 1,405,245**

Expenses include:

Mileage Charge at $0.75/mile

10% Markup on other project related expenses

Memo

To Board of Trustees

From Morgan Drake

Date May 1, 2024

SUBJECT Reuse Authorization Contracts

Situation
The district must execute reuse authorization contracts with Ash Creek Special Service District ("ACSSD"), La Verkin City, and Toquerville City to timely file an Application for Sewage Effluent Reuse ("Reuse Application") with the Utah State Engineer for the east side of the county and to satisfy funding requirements.

Background
Chief Toquer Reservoir will be funded, in part, with state and federal funds awarded to the district. Among other things, the state funding is conditioned on the district obtaining an order from the Utah State Engineer approving a Reuse Application.

The district has prepared a treatment reuse authorization contract with ACSSD. The district has been preparing a form municipal partner reuse authorization contract ("Municipal Partner Contract"). Among other things, the Municipal Partner Contract will address the quantity, timing, and rates for water deliveries from the district to the cities. Due to the level of detail and the number of parties involved, the Municipal Partner Contract will take time to complete and execute.

Assessment
The immediate need to file the Reuse Application, on the one hand, and the anticipated timeline for execution of the Municipal Partner Contract, on the other hand, pose a challenge. To resolve this issue, the district proposes executing interim reuse authorization contracts ("Interim Contracts") with Toquerville and La Verkin. The Interim Contracts will permit the district to file the east side Reuse Application with the State Engineer. When the Municipal Partner Contract is complete, and each city is ready to sign it, the Interim Contracts will be terminated.

Recommendation
Approve the Authorization Contract for Treatment of Domestic Wastewater Effluent with Ash Creek Special Service District
Approve the Reuse Authorization Contract with La Verkin City
Approve the Reuse Authorization Contract with Toquerville City

AUTHORIZATION CONTRACT FOR TREATMENT OF DOMESTIC WASTEWATER EFFLUENT [Ash Creek Special Service District]

This Reuse Authorization Contract ("**Agreement**") is entered into as of May 6, 2024 ("**Effective Date**"), by and between Washington County Water Conservancy District, a water conservancy district organized and existing under the Utah Water Conservancy District Act ("**WCWCD**") and Ash Creek Special Service District, a special service district organized and existing under the Utah Special Service District Act ("**ACSSD**"). WCWCD and ACSSD may be referred to herein individually as a "**Party**" or collectively as the "**Parties**."

RECITALS

A. Capitalized terms that do not have a definition in the Recitals are defined in Section 2 of this Agreement.

B. WCWCD is a Public Agency as defined in Section 73-3c-102(5) of the Utah Wastewater Reuse Act (Utah Code Ann. § 73-3c-101 to -401) ("**Reuse Act**").

C. WCWCD is a party to the Revised Regional Water Supply Agreement dated January 1, 2019, as it may be amended from time to time ("**RWSA**"). ACSSD is not a party to the RWSA.

D. WCWCD, in partnership with ACSSD and St. George City, is designing, permitting, and constructing the Regional Reuse System. The Regional Reuse System will be a Water Reuse Project as defined in Section 73-3c-102(9) of the Reuse Act.

E. ACSSD is a Public Agency; it plans to design, permit, construct, own, operate, and maintain multiple water reclamation facilities (each a "**Water Reclamation Facility**"), which are identified and described generally in Exhibit A, which is attached and incorporated herein. Each Water Reclamation Facility will be a publicly owned treatment works ("**POTW**"), as defined in Section 73-3c-102(4) of the Reuse Act. ACSSD will obtain a Utah Pollutant Discharge Elimination System ("**UPDES**") Permit with the Utah Division of Water Quality ("**DWQ**") to authorize discharges from each Water Reclamation Facility.

F. WCWCD diverts Water Rights and delivers District Water Supplies to Municipal Customers, Retail Customers, and Contract Users.

G. Municipal Customers, Retail Customers, Contract Users, and Non-RWSA Users may have entitlements to the beneficial use of water, whether by contract, interest in real property, or rights granted by the State or other governmental entity ("**MRC Water Rights**").

H. WCWCD will enter into Reuse Authorization Contracts with each Municipal Customer, Retail Customer, Contract User, or Non-RWSA User whose MRC Water Rights will be used in the Water Reuse Project or who will receive delivery of Reuse Water from the Water Reuse Project.

I. Beneficial use of the Water Rights and MRC Water Rights by Municipal Customers, Retail Customers, and Contract Users generates Domestic Wastewater. Beneficial use of MRC Water Rights owned by Non-RWSA Users may generate Domestic Wastewater. ACSSD plans to collect Domestic Wastewater generated within its service area and treat it at the Water Reclamation Facilities.

J. WCWCD has proposed a Water Reuse Project under which it will receive delivery of Reuse Water from the Water Reclamation Facilities, convey the Reuse Water using the WCWCD Reuse Facilities, and then deliver it for beneficial use by Municipal Customers, Retail Customers, Contract Users, and Non-RWSA Users.

K. WCWCD desires to receive and deliver Reuse Water, as permitted by the Reuse Act. ACSSD desires to deliver Reuse Water to WCWCD.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual covenants and agreements contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Recitals. The above-referenced recitals are incorporated into this Agreement by this reference.

2. Definitions.

a. "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.

b. "Non-RWSA User" means any water user that is not a party to the RWSA and has entered into a Reuse Authorization Contract with WCWCD that permits WCWCD to divert and use the Non-RWSA User's MRC Water Rights or provides for delivery of Reuse Water from WCWCD to the Non-RWSA User.

c. "Regional Reuse System" is a Water Reuse Project, as defined in the Reuse Act, and includes all water collection, conservation, development, storage, treatment, supply, transportation, and distribution facilities, hydroelectric generating, transmission and distribution facilities, and related facilities that are used to receive, convey, store, treat, and deliver Reuse Water.

d. Reuse Act. The following capitalized terms shall have the meaning set forth in the Reuse Act, as it may be amended from time to time: Domestic Wastewater; POTW; Public Agency; Reuse Authorization Contract; Reuse Water; and Water Reuse Project.

e. RWSA. The following capitalized terms shall have the meaning set forth in Section 1.1 of the RWSA, as it may be amended from time to time: Contract Users; District Water Supplies; Municipal Customers; Retail Customers; and Water Rights.

f. "Uncontrollable Forces" means (i) any cause beyond the reasonable control of the Party affected, including inadequate supply of water, failure of facilities, flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, accident, unlawful actions or omissions by others, and restraint by court or public authority, which, by exercise of due diligence and foresight, the Party could not reasonably have been expected to avoid, and (ii) the inability to acquire for any particular facility the necessary (A) financing, (B) environmental permits, (C) land use and other required authorizations, or (D) other permits or authorizations.

g. "WCWCD Reuse Facilities" includes all water collection, conservation, development, storage, treatment, supply, transportation, and distribution facilities, hydroelectric generating, transmission and distribution facilities, and related facilities used to receive, convey, store, treat and deliver Reuse Water that are (i) currently owned or operated by WCWCD; or (ii) to be hereafter owned or operated by WCWCD.

3. Term and Termination. This Agreement shall remain in full force and effect for fifty (50) years from the Effective Date; provided, however, that the Parties may (a) terminate this Agreement early through a written agreement signed by each Party or (b) extend the term of this Agreement through a written agreement signed by each Party.

4. Reuse Authorization. This Agreement shall constitute a Reuse Authorization Contract for purposes of Sections 73-3c-202(1) and 73-3c-102(7)(a) of the Reuse Act. WCWCD acknowledges that it may only reuse Water Rights and MRC Water Rights that are approved by the Utah State Engineer for municipal use and that reuse must be consistent with the underlying Water Rights and MRC Water Rights, or a change application must be approved by the Utah State Engineer.

5. Identification of Water Reclamation Facilities. For each Water Reclamation Facility that ACSSD designs, the Parties will, in an amendment to Exhibit A, identify the Water Reclamation Facility, describe its location, and provide a general description of it.

6. Water Reclamation Facility Permitting.

a. UPDES. ACSSD, at its sole cost, shall obtain approval of a separate UPDES permit for each Water Reclamation Facility in accordance with Section 19-5-107 of the Utah Code, and Rule R317-8 of the Utah Administrative Code, and other Applicable Laws, as they may be amended from time to time. Each UPDES permit shall authorize discharge of treated Domestic Wastewater to the Regional Reuse System at locations identified by the District.

b. Construction Permit. ACSSD, at its sole cost, shall secure separate construction permits for each Water Reclamation Facility in accordance with Rules R317-1-2.2, R317-3, and R317-13-2.4(B) of the Utah Administrative Code, as they may be amended from time to time.

c. Project Plan. The Parties shall cooperate in good faith to prepare a Project Plan, as required by Rule R317-3-11.3 for the Utah Administrative Code, as it may be amended from time to time, for each Water Reclamation Facility.

d. Operating Permit. ACSSD, at its sole cost, shall secure separate approvals from DWQ's Director for each Water Reclamation Facility, and obtain separate operating permits for each POTW, in accordance with Section 73-3c-301 of the Utah Code, Rules R317-13-2.4(C), R317-13-3.1, and R317-3-11 of the Utah Administrative Code, and Applicable Laws, as they may be amended from time to time.

e. Utah State Engineer Approval.

i. WCWCD, at its sole cost, shall obtain one or more orders from the Utah State Engineer, in accordance with Section 73-3c-302(6) of the Utah Code, as it may be amended from time to time, approving diversion of Reuse Water from each Water Reclamation Facility for conveyance through the Regional Reuse System and delivery for subsequent beneficial use.

ii. From time to time, in its sole discretion and at its sole cost, WCWCD may file additional applications with the Utah State Engineer to authorize reuse of additional Water Rights or MRC Water Rights, whether currently owned or hereafter acquired, in connection with the Regional Reuse System.

f. Other Permits.

i. ACSSD, at its sole cost, shall obtain all other local, state, and federal permits and approvals required by Applicable Laws to construct and operate each Water Reclamation Facility.

ii. WCWCD, at its sole cost, shall obtain all other local, state, and federal approvals required to construct and operate the WCWCD Reuse Facilities.

g. Reporting.

i. ACSSD shall report the volume and quality of Reuse Water delivered to WCWCD from each Water Reclamation Facility in the monthly operating reports that it submits to DWQ.

ii. WCWCD shall comply with reporting requirements for the Regional Reuse System set forth in final orders of the Utah State Engineer that authorize diversion of Reuse Water from one or more Water Reclamation Facilities.

h. Good Standing. Each Party agrees to file all subsequent applications, requests, reports, or other documents necessary to keep active and maintain in good standing the permits it obtained pursuant to this Section 6.

7. Construction.

a. Subject to Section 7(d), ACSSD shall, at its sole cost, design and permit each Water Reclamation Facility. ACSSD shall, at its sole cost, construct and install each Water Reclamation Facility in a safe, good, and workmanlike manner and in conformance with the design and Applicable Law.

b. ACSSD shall design, permit, construct, and install, at its sole cost, improvements and upgrades to, or future phases of, each Water Reclamation Facility (i) as necessary to serve demand for treatment of Domestic Wastewater generated from ACSSD's service area, as it may be modified from time to time and (ii) in a manner that will permit delivery of Reuse Water from the improved or upgraded facilities, or future phases, of the applicable Water Reclamation Facility to WCWCD in accordance with the terms of this Agreement, including the treatment standards set forth in Section 10(a).

c. Subject to Section 6(d), WCWCD shall, at its sole cost, design and permit the WCWCD Reuse Facilities. WCWCD shall, at its sole cost, construct and install WCWCD Reuse Facilities in a safe, good, and workmanlike manner and in conformance with the relevant designs and Applicable Law.

d. The Parties shall cooperate in good faith during design of the Water Reclamation Facilities and WCWCD Reuse Facilities to ensure that the facilities are designed and constructed in a manner that allows each Party to fulfill its obligations under this Agreement.

8. Inspection.

a. WCWCD's staff and consultants shall have the reasonable right of access to each Water Reclamation Facility, and any portions thereof, during the period of construction, to inspect, test, and observe the applicable Water Reclamation Facility, and any work thereon, and for all other purposes necessarily incident to this Agreement.

b. ACSSD's staff and consultants shall have the reasonable right of access to the WCWCD Reuse Facilities, during the period of construction, to inspect, test, and observe any work thereon.

9. Operation and Maintenance.

a. ACSSD shall perform all operations, maintenance, repair, and replacement ("**O&M**") on each Water Reclamation Facility and its appurtenant facilities consistent with the terms of this Agreement; in a safe, good, and workmanlike manner; in compliance with Applicable Law; and in conformance with industry standards.

b. WCWCD shall perform all O&M on the WCWCD Reuse Facilities consistent with the terms of this Agreement; in a safe, good, and workmanlike manner; in compliance with Applicable Law; and in conformance with industry standards.

10. Point of Delivery of Reuse Water and Parties' Facilities. The Parties agree to cooperate in good faith during design of each Water Reclamation Facility to (a) define the point of delivery of Reuse Water from the applicable Water Reclamation Facility to the WCWCD Reuse Facilities and (b) distinguish between the end of the applicable Water Reclamation Facility, which will be owned and operated by ACSSD in accordance with Section 9(a), and the beginning of the WCWCD Reuse Facilities, which will be owned and operated by WCWCD in accordance with Section 9(b). The Parties shall agree upon the information required by Section 10(a)-(b) and

include a description and depiction of this information as part of Exhibit B, which is attached and incorporated herein by this reference.

11. Domestic Wastewater Treatment Standards.

a. ACSSD shall, at a minimum, treat Domestic Wastewater at the Water Reclamation Facilities to the standards, and for the uses, set forth in Exhibit C, which is attached and incorporated herein by this reference. The Parties acknowledge and agree that Exhibit C may specify different minimum treatment standards and uses for each Water Reclamation Facility.

b. WCWCD may, in its sole discretion, elect to design, permit, construct, and operate additional treatment facilities as part of the WCWCD Reuse Facilities for the purpose of treating Reuse Water from one or more of the Water Reclamation Facilities to a standard higher than what is set forth in Exhibit C.

c. ACSSD may, in its sole discretion, elect to design, permit, construct, and operate additional treatment facilities as part of any Water Reclamation Facility for the purpose of treating Reuse Water to a standard higher than what is set forth in Exhibit C.

12. Water Right Ownership and Reuse Authorization Contracts.

a. WCWCD is the owner of all Water Rights held by WCWCD on the Effective Date, or subsequently acquired by WCWCD. The Water Reclamation Facilities will receive Domestic Wastewater generated from beneficial use of the Water Rights; treat it pursuant to Sections 11(a) and 11(c); and deliver Reuse Water. This Agreement authorizes ACSSD's delivery of Reuse Water attributable to the Water Rights to WCWCD and such deliveries are not contingent upon any other agreements or contracts. ACSSD acknowledges that WCWCD is the owner of Reuse Water attributable to the Water Rights.

b. The MRC Water Rights are owned by the applicable Municipal Customer, Retail Customer, Contract User, and Non-RWSA User. The Water Reclamation Facilities will receive Domestic Wastewater generated from beneficial use of the MRC Water Rights; treat it pursuant to Sections 11(a) and 11(c); and deliver Reuse Water. WCWCD will enter into a separate Reuse Authorization Contract with each Municipal Customer, Retail Customer, Contract User, and Non-RWSA User that grants WCWCD the right to use and deliver Reuse Water attributable to the applicable MRC Water Rights. ACSSD acknowledges that WCWCD will have the right to use Reuse Water attributable to the MRC Water Rights pursuant to the Reuse Authorization Contract with each Municipal Customer.

13. Reuse Water Delivery.

a. WCWCD shall have the first priority to all effluent produced by each Water Reclamation Facility. ACSSD may use effluent from each Water Reclamation Facility that is in excess of WCWCD's demand for Reuse Water in a manner that is consistent with Applicable Law or it may discharge effluent in accordance with its UPDES permits.

b. WCWCD shall notify ACSSD of the requested rate, volume, and timing for deliveries of Reuse Water from each Water Reclamation Facility. Subject to Section 13(d), ACSSD agrees to deliver Reuse Water to WCWCD at the rate, in the volume, and at the times requested by WCWCD.

c. WCWCD's delivery and beneficial use of Reuse Water shall be consistent with the underlying Water Rights and MRC Water Rights, as they may be modified from time to time by one or more change applications approved by the Utah State Engineer.

d. ACSSD shall provide WCWCD with at least 30 days' notice of planned maintenance activities that will result in interruption to delivery of Reuse Water to WCWCD. In the event that an equipment failure or upset condition ("**Emergency Conditions**"), or unplanned maintenance at a Water Reclamation Facility will result in interruption to delivery of Reuse Water to WCWCD, ACSSD shall immediately notify WCWCD. ACSSD shall make commercially reasonable efforts to minimize or avoid reductions in delivery of Reuse Water to WCWCD from the Water Reclamation Facilities due to Emergency Conditions or unplanned maintenance. ACSSD may only curtail or suspend delivery of Reuse Water to WCWCD from a Water Reclamation Facility as a result of Emergency Conditions or unplanned maintenance for so long as (i) the Emergency Conditions exist or (ii) it reasonably takes to complete the unplanned maintenance. If ACSSD has curtailed or suspended delivery of Reuse Water to WCWCD from a Water Reclamation Facility, ACSSD shall use its best efforts to resume full delivery of Reuse Water to WCWCD at the earliest practicable time.

14. Mutual Indemnity. The Parties are "governmental entities" as defined in the Utah Governmental Immunity Act (Utah Code § 63G-7-101 et. seq.). Nothing in this Agreement will be construed as a waiver by either or both Parties of any rights, limits, protections, or defenses provided by the Utah Governmental Immunity Act. Nor shall this Agreement be construed, with respect to third parties, as a waiver of any governmental immunity to which a Party to this Agreement is otherwise entitled. Subject to and consistent with the Utah Governmental Immunity Act, each Party (as the "**Indemnifying Party**") shall indemnify, defend and hold harmless the other Party and its Board, managers, members, agents, and employees (collectively, the "**Indemnified Party**") from and against all claims and liabilities (including reasonable attorney's fees and court costs) caused by or arising out of any third-party claim alleging: (a) a negligent or more culpable act or omission of the Indemnifying Party, including any reckless or willful misconduct, in connection with the performance of its obligations under this Agreement, (b) any bodily injury, death of any person, or damage to real or tangible personal property caused by the negligent or more culpable act or omission of the Indemnifying Party, including any reckless or willful misconduct, or (c) violation of Applicable Laws by the Indemnifying Party, except to the extent a claim or liability under Section 14(a) and (b) results from the gross negligence, recklessness, or willful misconduct of the Indemnified Party.

15. Default.

a. Subject to Section 15(b), if a Party 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 ("**Cure Period**") after receiving written notice

of default from the non-breaching Party, then the non-breaching Party may, in 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, damages, and/or termination of the Agreement;

b. If a default described in Section 15(a) cannot reasonably be cured within the Cure Period, and the defaulting Party 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 to one hundred twenty (120) days (including the original period of thirty (30) days), so long as the defaulting Party continues 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 the non-defaulting Party may, in 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, damages, and/or termination of the Agreement.

16. Notice. Any and all notices, demands, or other communications (except communications under Section 13(b)) required pursuant to this Agreement must be in writing and shall have been properly given and effective when received by the Party to be noticed, or when deposited in the United States mail, certified or registered, or when deposited with a nationally recognized overnight delivery service which keeps receipts of delivery, to the following addresses:

To WCWCD at:
Washington County Water Conservancy District
Attn: General Manager
533 East Waterworks Drive
St. George, Utah 84770

To ACSSD at:
Ash Creek Special Service District
Attn: Superintendent
1350 South Sand Hollow Road
Hurricane, Utah 84737

Either Party may change its address for the purpose of receiving notices, demands and other communications set forth in this Agreement by providing written notice in the manner set forth above.

17. Force Majeure. No Party shall be considered to be in default with respect to any obligation herein and no Party shall forfeit any right provided herein if the defaulting Party was prevented from fulfilling such obligation or exercising such right by reason of Uncontrollable Forces. A Party rendered unable to fulfill any obligation or exercise any right by reason of Uncontrollable Forces shall use every reasonable effort to remove such inability with all reasonable dispatch.

18. Further Assurances.

a. The Parties to this Agreement agree to do such further acts, take such action, and to execute and deliver to each other such additional agreements, certificates, documents, and instruments as may reasonably be required or deemed advisable to effect the purposes of this Agreement.

b. Each Party (as the ("**Non-Financing Party**") acknowledges that the other Party (as the "**Financing Party**") may finance or refinance design, construction, and operation of the WCWCD Reuse Facilities (in the case of WCWCD) or the Water Reclamation Facilities (in the case of ACSSD) from time to time with bonds, loans, grants, and other financial instruments ("**Instruments**"). The Non-Financing Party shall execute all agreements, consents, certificates, and other documents reasonably requested in order that any Instruments be issued in compliance with Applicable Laws, and shall provide whatever additional information is reasonably requested by the Financing Party in connection with complying with Applicable Laws. The Non-Financing Party agrees to comply with requirements set forth by bondholders, lenders, or similar parties as necessary for the Financing Party to secure and maintain the Instruments.

19. Assignment. Except as provided in Section 20, or as otherwise agreed to by the Parties in writing, neither WCWCD nor ACSSD may assign or otherwise transfer any of its rights or obligations under this Agreement and any such purported assignment or other transfer shall be void.

20. Permitted Assignments. A Financing Party may assign any of its rights and obligations under this Agreement in connection with the Instruments.

21. Binding Effect. This Agreement shall bind and benefit the respective successors and assigns of the Parties.

22. No Relationship. Nothing in this Agreement creates, or is intended to create, any interlocal entity, partnership, joint venture, or fiduciary relationship between the Parties.

23. No Third-Party Rights. The obligations of WCWCD and ACSSD set forth in this Agreement shall not create any rights in or obligations to any other persons or parties not a party to this Agreement.

24. Entire Agreement. This 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.

25. No Waiver. Any Party's failure to enforce any of the provisions of this Agreement shall not constitute a waiver of the right to enforce such provision. The provisions of this 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.

26. Severability. If any provision of this Agreement is held to be invalid, illegal, or unenforceable by a final decision of a court of competent jurisdiction, any enforceable portion thereof, and the remaining provisions of this Agreement, shall continue in full force and effect.

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

28. Amendment. This Agreement may only be amended, modified, or supplemented by a written agreement signed by WCWCD and ACSSD.

29. Interpretation. 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 Agreement; and (ii) the terms and provisions of the 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 Agreement.

30. Paragraph Headings. The paragraph and subparagraph headings used herein are for convenience only and shall not be considered in the interpretation of this Agreement.

31. Counterparts. This 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.

[*Signatures on following page*]

IN WITNESS WHEREOF, the Parties have executed this Agreement by and through their respective, duly authorized representatives as of the Effective Date.

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT, a Utah water conservancy district

By: _____
Name: Ed Bowler
Its: Chair, Board of Trustees

ATTEST:

_____
Secretary, Board of Trustees

[SEAL]

The undersigned is the attorney for the Washington County Water Conservancy District and hereby certifies that this Agreement is binding, effective, valid, and enforceable against the District in accordance with its terms.

_____
By: Jodi Richins, WCWCD's Counsel

ASH CREEK SPECIAL SERVICE DISTRICT, a Utah special service district

By: _____
Name: Nanette Billings
Its: Chair, Administrative Control Board

ATTEST:

_____
Secretary, Administrative Control Board

[SEAL]

The undersigned is the attorney for the Ash Creek Special Service District and hereby certifies that this Agreement is binding, effective, valid, and enforceable against the District in accordance with its terms.

_____
By: [Name], ACSSD's Counsel

Exhibit A
[To ACSSD Authorization Contract for Treatment of Domestic Effluent]

Identity of Each Water Reclamation Facility

[The Parties will identify, describe the location, and provide a general description of each Water Reclamation Facility under Section 5. The initial Agreement shall include a description of the Confluence Park Water Reclamation Facility.]

Exhibit B
[To ACSSD Authorization Contract for Treatment of Domestic Effluent]

Point of Delivery and Identification of Parties' Facilities

[To be inserted during design of each Water Reclamation Facility pursuant to Section 10. The initial Agreement will include a description of the Point of Delivery and Parties' Facilities for the Confluence Park Water Reclamation Facility and related WCWCD Reuse Facilities.]

Exhibit C
[To ACSSD Authorization Contract for Treatment of Domestic Effluent]

Treatment Standards and Uses for the Water Reclamation Facilities

1. To permit Type I use of Reuse Water, ACSSD shall utilize the required treatment processes, comply with the water quality limits, and satisfy the other requirements of Rule R317-3-11 of the Utah Administrative Code and Applicable Laws, as these authorities may be amended from time to time.

2. Domestic Wastewater at each Water Reclamation Facility shall be treated to permit Type I uses of Reuse Water, as set forth in Rule R317-3-11.4(A) of the Utah Administrative Code and Applicable Law, as these authorities may be amended from time to time, including, without limitation, use for residential irrigation; landscape irrigation; irrigation of food crops; and irrigation of pasture for milking animals.

REUSE AUTHORIZATION CONTRACT
[La Verkin City]

This Reuse Authorization Contract ("**Agreement**") is entered into as of May 6, 2024 ("**Effective Date**"), by and between Washington County Water Conservancy District, a water conservancy district organized and existing under the Utah Water Conservancy District Act ("**WCWCD**") and La Verkin City, a municipal corporation and political subdivision of the State of Utah ("**City**"). WCWCD and City may be referred to herein individually as a "**Party**" or collectively as the "**Parties**."

RECITALS

A. Capitalized terms that do not have a definition in the Recitals are defined in Section 2 of this Agreement.

B. WCWCD is a Public Agency as defined in Section 73-3c-102(5) of the Utah Wastewater Reuse Act (Utah Code Ann. § 73-3c-101 to -401) ("**Reuse Act**").

C. WCWCD, in cooperation with City, other municipal partners, and regional publicly owned treatment works operated by Ash Creek Special Service District ("**ACSSD**") and St. George City, is designing, permitting, and constructing the Regional Reuse System. The Regional Reuse System will be a Water Reuse Project as defined in Section 73-3c-102(9) of the Reuse Act.

D. City is a Public Agency and it supplies retail water to its residents.

E. City has entitlements to the beneficial use of water, whether by contract, interest in real property, or rights granted by the State or other governmental entity; these entitlements are identified in Exhibit A ("**City Water Rights**").

F. The City's retail delivery and beneficial use of the City Water Rights generates Domestic Wastewater. ACSSD will collect Domestic Wastewater generated from beneficial use of the City Water Rights and treat it at one or more Water Reclamation Facilities that it plans to design, permit, construct, own, operate, and maintain ("**Water Reclamation Facilities**").

G. WCWCD's planned Regional Reuse System will receive delivery of Reuse Water generated from treatment of the City Water Rights at the Water Reclamation Facilities, convey the Reuse Water using the WCWCD Reuse Facilities, and then deliver it for beneficial use by users, including the City. The City will supply the Reuse Water it receives to its retail customers.

H. WCWCD desires to receive and deliver Reuse Water, as permitted by the Reuse Act. City desires to authorize WCWCD to use the City Water Rights in connection with the Regional Reuse System and to receive Reuse Water deliveries from WCWCD.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual covenants and agreements contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. **Recitals**. The above-referenced recitals are incorporated into this Agreement by this reference.

2. **Definitions**.

a. "Regional Reuse System" is a Water Reuse Project, as defined in the Reuse Act, and includes all water collection, conservation, development, storage, treatment, supply, transportation, and distribution facilities, hydroelectric generating, transmission and distribution facilities, and related facilities that are used to receive, convey, store, treat, and deliver Reuse Water.

b. Reuse Act. The following capitalized terms shall have the meaning set forth in the Reuse Act, as it may be amended from time to time: Domestic Wastewater; Public Agency; Reuse Authorization Contract; Reuse Water; and Water Reuse Project.

c. "WCWCD Reuse Facilities" includes all water collection, conservation, development, storage, treatment, supply, transportation, and distribution facilities, hydroelectric generating, transmission and distribution facilities, and related facilities used to receive, convey, store, treat and deliver Reuse Water that are (i) currently owned or operated by WCWCD or (ii) to be hereafter owned or operated by WCWCD.

3. **Reuse Authorization**. This Agreement shall constitute a Reuse Authorization Contract for purposes of Sections 73-3c-202(1) and 73-3c-102(7)(a) of the Reuse Act. City consents to WCWCD's receipt of Reuse Water generated from the City Water Rights and delivery of that Reuse Water for beneficial use through the WCWCD Reuse Facilities and the Regional Reuse System. In addition, City, as an entity that will engage in retail sale of Reuse Water from the Regional Reuse System, and as an entity that retails water that will be replaced by Reuse Water, consents to receive delivery of Reuse Water from WCWCD. WCWCD acknowledges that it may only reuse City Water Rights that are approved by the Utah State Engineer for municipal use and that reuse must be consistent with the underlying City Water Rights, or a change application must be approved by the Utah State Engineer.

4. **Term of Agreement**. This Agreement shall remain in effect for one year from the Effective Date ("**Term**"); provided, however, that WCWCD may, in its sole discretion, extend the Term for successive one-year periods by providing written notice to City 60 days prior to expiration of the initial Term, or any successive Terms. The Parties may terminate this Agreement through a written agreement signed by each Party.

5. **No Relationship**. Nothing in this Agreement creates, or is intended to create, any interlocal entity, partnership, joint venture, or fiduciary relationship between the Parties.

6. **Default**. No breach of any provision of this Agreement shall entitle the other Party to unilaterally terminate, cancel, or rescind this Agreement. All other rights and remedies of the Parties available at law or in equity shall not be affected by this Section.

7. **No Waiver**. Any Party's failure to enforce any of the provisions of this Agreement shall not constitute a waiver of the right to enforce such provision. The provisions of this 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 any other provision.

8. Miscellaneous. Any term of this Agreement may be amended only with the written consent of the Parties. This Agreement constitutes the entire agreement of the Parties and supersedes all oral negotiations and prior writings with respect to the subject matter hereof. The validity, interpretation, construction, and performance of this Agreement shall be governed by the laws of the State of Utah. If any provision of this Agreement is held to be unenforceable, any enforceable portion thereof, and the remaining provisions of this Agreement, shall continue in full force and effect. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

[*Signatures on following page*]

IN WITNESS WHEREOF, the Parties have executed this Agreement by and through their respective, duly authorized representatives as of the Effective Date.

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT, a Utah water conservancy district

By: _____
Name: Ed Bowler
Its: Chair, Board of Trustees

ATTEST:

_____
Secretary, Board of Trustees

[SEAL]

The undersigned is the attorney for the Washington County Water Conservancy District and hereby certifies that this Agreement is binding, effective, valid, and enforceable against the District in accordance with its terms.

_____
By: Jodi Richins, WCWCD's Counsel

LA VERKIN CITY, a municipal corporation and political subdivision of the State of Utah

By: _____
Name: Kelly Wilson
Its: Mayor

ATTEST:

_____
City Recorder

[SEAL]

The undersigned is the attorney for the City of La Verkin and hereby certifies that this Agreement is binding, effective, valid, and enforceable against the City in accordance with its terms.

By: _____
Name: _____
Its: City Attorney

Exhibit A
City Water Rights

Culinary Water Source	Water Right #	Water Right (AF)
Ash Creek Springs & Upper Ash Creek Springs	81-1073	72
	81-687	71.35
	81-1602	330
	Subtotal	***473.35***
Toquerville Springs	81-2287	241.1
Total		**714.45**

REUSE AUTHORIZATION CONTRACT
[Toquerville City]

This Reuse Authorization Contract ("**Agreement**") is entered into as of May 6, 2024 ("**Effective Date**"), by and between Washington County Water Conservancy District, a water conservancy district organized and existing under the Utah Water Conservancy District Act ("**WCWCD**") and Toquerville City, a municipal corporation and political subdivision of the State of Utah ("**City**"). WCWCD and City may be referred to herein individually as a "**Party**" or collectively as the "**Parties**."

RECITALS

A. Capitalized terms that do not have a definition in the Recitals are defined in Section 2 of this Agreement.

B. WCWCD is a Public Agency as defined in Section 73-3c-102(5) of the Utah Wastewater Reuse Act (Utah Code Ann. § 73-3c-101 to -401) ("**Reuse Act**").

C. WCWCD, in cooperation with City, other municipal partners, and regional publicly owned treatment works operated by Ash Creek Special Service District ("**ACSSD**") and St. George City, is designing, permitting, and constructing the Regional Reuse System. The Regional Reuse System will be a Water Reuse Project as defined in Section 73-3c-102(9) of the Reuse Act.

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E. City has entitlements to the beneficial use of water, whether by contract, interest in real property, or rights granted by the State or other governmental entity; these entitlements are identified in Exhibit A ("**City Water Rights**").

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G. WCWCD's planned Regional Reuse System will receive delivery of Reuse Water generated from treatment of the City Water Rights at the Water Reclamation Facilities, convey the Reuse Water using the WCWCD Reuse Facilities, and then deliver it for beneficial use by users, including the City. The City will supply the Reuse Water it receives to its retail customers.

H. WCWCD desires to receive and deliver Reuse Water, as permitted by the Reuse Act. City desires to authorize WCWCD to use the City Water Rights in connection with the Regional Reuse System and to receive Reuse Water deliveries from WCWCD.

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2. **Definitions**.

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b. Reuse Act. The following capitalized terms shall have the meaning set forth in the Reuse Act, as it may be amended from time to time: Domestic Wastewater; Public Agency; Reuse Authorization Contract; Reuse Water; and Water Reuse Project.

c. "WCWCD Reuse Facilities" includes all water collection, conservation, development, storage, treatment, supply, transportation, and distribution facilities, hydroelectric generating, transmission and distribution facilities, and related facilities used to receive, convey, store, treat and deliver Reuse Water that are (i) currently owned or operated by WCWCD or (ii) to be hereafter owned or operated by WCWCD.

3. **Reuse Authorization**. This Agreement shall constitute a Reuse Authorization Contract for purposes of Sections 73-3c-202(1) and 73-3c-102(7)(a) of the Reuse Act. City consents to WCWCD's receipt of Reuse Water generated from the City Water Rights and delivery of that Reuse Water for beneficial use through the WCWCD Reuse Facilities and the Regional Reuse System. In addition, City, as an entity that will engage in retail sale of Reuse Water from the Regional Reuse System, and as an entity that retails water that will be replaced by Reuse Water, consents to receive delivery of Reuse Water from WCWCD. WCWCD acknowledges that it may only reuse City Water Rights that are approved by the Utah State Engineer for municipal use and that reuse must be consistent with the underlying City Water Rights, or a change application must be approved by the Utah State Engineer.

4. **Term of Agreement**. This Agreement shall remain in effect for one year from the Effective Date ("**Term**"); provided, however, that WCWCD may, in its sole discretion, extend the Term for successive one-year periods by providing written notice to City 60 days prior to expiration of the initial Term, or any successive Terms. The Parties may terminate this Agreement through a written agreement signed by each Party.

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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 any other provision.

8. Miscellaneous. Any term of this Agreement may be amended only with the written consent of the Parties. This Agreement constitutes the entire agreement of the Parties and supersedes all oral negotiations and prior writings with respect to the subject matter hereof. The validity, interpretation, construction, and performance of this Agreement shall be governed by the laws of the State of Utah. If any provision of this Agreement is held to be unenforceable, any enforceable portion thereof, and the remaining provisions of this Agreement, shall continue in full force and effect. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together will constitute one and the same instrument.

[*Signatures on following page*]

IN WITNESS WHEREOF, the Parties have executed this Agreement by and through their respective, duly authorized representatives as of the Effective Date.

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT, a Utah water conservancy district

By: _____
Name: Ed Bowler
Its: Chair, Board of Trustees

ATTEST:

_____
Secretary, Board of Trustees

[SEAL]

The undersigned is the attorney for the Washington County Water Conservancy District and hereby certifies that this Agreement is binding, effective, valid, and enforceable against the District in accordance with its terms.

_____
By: Jodi Richins, WCWCD's Counsel

TOQUERVILLE CITY, a municipal corporation and political subdivision of the State of Utah

By: _____
Name: Justin Sip
Its: Mayor

ATTEST:

_____
City Recorder

[SEAL]

The undersigned is the attorney for the City of Toquerville and hereby certifies that this Agreement is binding, effective, valid, and enforceable against the City in accordance with its terms.

By: _____
Name: _____
Its: City Attorney

Exhibit A
City Water Rights

Culinary Water Supplies	Water Right #	Water Right (AF)
Toquerville Springs	81-3474	12.384
	81-3475	67.44
	81-3476	93.12
	81-4063	3.84
	81-3546	361.98
	Subtotal	***538.76***
Ash Creek Springs	81-2739	18.57
Total		**557.33**

WASHINGTON COUNTY
WATER
CONSERVANCY
DISTRICT

Procurement Memo

To Zachary Renstrom, General Manager

From Trinity Stout, Project Manager

Date May 2, 2024

Subject Procurement of Construction Services

Type of Procurement: Invitation for Bids for Construction Services

Item Description: Construction services for the Outfall Irrigation

Reason for Procurement: The Project Development Department of the Washington County Water Conservancy District (district) needs to procure this service as part of the Ask Creek Project and the Regional Reuse System. This pipeline will deliver Ash Creek water stored in the Chief Toquer Reservoir to the Toquerville Secondary Water System and also convey treated reuse water to from the Confluence Park Water Reclamation Facility to the reservoir.

Review of Bidders: Interstate Rock, Inc. submitted the lowest responsive bid of $2,161,067.50. Other bids received are described in the attached bid tabulation.

Purchase Amount: $2,161,067.50

Contract Type(s): Fixed Price

Accounting Code: 60-5265-720

Approved:

Zachary Renstrom, General Manager

ALPHA ENGINEERING
43 South 100 East, Suite 100
St George, Utah 84770
T 435.628.6500
F 435.628.6553
alphaengineering.com

May 2, 2024

Mr. Trinity Stout
Washington County Water Conservancy District
533 East Waterworks Drive
St. George, UT 84770

Re: Outfall Irrigation Pipeline Project

Dear Trinity:

As you are aware, seven bids were received for the above-mentioned project. Please find attached the bid tabulation for the project. Interstate Rock Products was the lowest bid with a price of $2,161,067.50. The following are the bidders and their amounts:

Bidder	**Amount**
Interstate Rock Products	$2,161,067.50
Feller Enterprises	$2,331,761.75
Royal T. Enterprises	$2,631,290.00
Whitaker Construction	$2,667,005.00
M&T Enterprises	$2,668,675.50
PCI	$2,960,380.00
Sunroc	$3,007,531.50

We reviewed the unit costs of the low bid in comparison to other bids received and there are not any major discrepancies. We recommend awarding the bid to Interstate Rock Products if the project is within the budget you have planned for the project.

Sincerely,

Todd Gardner, P.E.
Alpha Engineering Company

Outfall Irrigation Pipeline Project

Legend

- Outfall Irrigation Pipeline - Phase I
- Outfall Irrigation Pipeline - Phase II

Veterans Memorial Hwy

15

17

17

17

Toquerville

N

5000 ft

Google Earth

Image © 2024 Airbus

WASHINGTON COUNTY
WATER
CONSERVANCY
DISTRICT

Procurement Memo

To Zachary Renstrom, General Manager

From Brie Thompson, Associate General Manager

Date May 6, 2024

Subject Procurement of Two Water Filters for the Ivins Filter Station

---

Type of Procurement: Invitation for Bids for Product

Item Description: Two, replacement Amiad ABF-1000 Automatic Self-Cleaning Water Filters for the Ivins Filter Station.

Reason for Procurement: The Operations and Planning Department of the Washington County Water Conservancy District (district) needs to procure this product because the existing filters at the Ivins Filter Station which filter debris from Ivins reservoir water are worn and need to be replaced.

Review of Bidders: Scholzen's submitted the lowest responsive bid of $124,024.44. Other bids received are described in the attached bid tabulation.

Purchase Amount: $124,024.44

Contract Type(s): fixed price.

Accounting Code: 30-7800-742

Approved:

_____

Zachary Renstrom, General Manager

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

BID TABULATION STATEMENT TWO AMIAD ABF-1000 SELF-CLEANING WATER FILTERS

				Scholzen's Products		Sprinkler Supply Co.		Turf Equipment and Irrigation Supply		Mountainland Supply Company	
Item	Description	Qty.	Units	Unit Price	Total	Unit Price	Total	Unit Price	Total	Unit Price	Total
1	14" ABF-1000	2	Each	$55,452.22	$110,904.44	$55,352.41	$110,704.82	$57,973.00	$115,946.00	$63,770.063	$127,540.13
2	Allen Bradley PLC Controller	2	Each	$5,560.00	$11,120.00	$5,972.27	$11,944.54	$6,255	$12,510	$6,880.50	$13,761.00
3	Freight	1	Total	$2,000	$2,000	$2,000.00	$2,000.00	$1,000	$1,000	$2,000	$2,000
		Total			$124,024.44		$124,649.36		$129,456.00		$143,301.13

WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

Procurement Memo

To Zachary Renstrom, General Manager

From Brock Belnap

Date May 1, 2024

Subject Procurement of Phase 2 and 3 of Project Delivery System

---

Type of Procurement: Design Professional Procurement for Services

Item Description: This is a continuation of a contract with Hazen and Sawyer for a project delivery system that the Board previously approved on October 10, 2023. The project delivery system will assist the District manage, monitor, and complete various water delivery, treatment, and related infrastructure projects and studies.

Reason for Procurement: Phase 1 (identification of processes) has been completed and Phase 2 (identification of software) and 3 (implementation) are now ready to proceed.

Review of Design Professionals: The Board previously determinined that Hazen and Sawyer was the highest scoring design professional with which a satisfactory contract was negotiated at a price fair and reasonable to the district after a Request for Statement of Qualifications. (See the October 10, 2023 Board Minutes and October 2, 2023 Procurement Memo).

Purchase Amount: Phase 2: $243,820
Phase 3: $55,990
Total: $299,810

Contract Type(s): Fixed price

Accounting Code: 10-4000-323

Approved:

Zachary Renstrom, General Manager

Project Delivery System (PDS) Phase 2 & 3
Scope of Services

Project Description

WCWCD is embarking on a comprehensive strategic plan to enhance conservation, increase and renew water supply and upgrade treatment capability. Management and tracking of the district's 90+ projects, estimated at $1B+ will require a comprehensive Project Delivery System (PDS) with functionality to support design, collaboration, planning, scheduling, estimating, procurement and management of resources, documents, contracts, budget/cost, risk, and outreach. Defining each type of data, how it will be captured, maintained, transmitted, and secured is essential to successful implementation of the PDS.

Implementation of the PDS will have a transformative impact on WCWCD. To manage these impacts and realize the most benefit, it's important to plan carefully, address challenges head-on and continuously assess and adapt to meet WCWCD's evolving needs.

Summary Approach

Phase 1
Hazen worked collaboratively with WCWCD to define a project delivery framework, detailed tasks, associated roles and responsibilities and project management training.

Phase 2
Hazen will continue to develop a comprehensive project delivery system to support current and future initiation, planning, execution, control, and close-out of multiple types of capital projects. Phase 2 will leverage the previous outcomes to further define business processes and standards that will inform selection and configuration of PDS software.

The work is broken into the following tasks:

110. ***Project Management and Implementation Oversight***
This task covers the ongoing commitment to active senior leadership of the effort. Deliverables include status updates, invoices, meetings, notes, and documentation.

500. ***Project Planning Process Workshops***
A series of workshops will be held to develop standard planning phase processes used to set up capital projects. The workshops will include development of forms, checklists and/or workflow diagrams to help the District staff visualize project details, hand-offs, approvals, and milestones.

600. ***Finalized Requirements and System Selection***
This task will produce software requirements for automation of the tasks defined in the framework and prioritized for automation by the District. This task will also provide support for selection of the PDS software. Deliverables will be finalized requirements, research and shortlisting of software vendors, and an interview script and scoring system. WCWCD will make the final selection and purchase agreement for the software and associated implementation services.

Phase 3
Software vendors have routine approaches to implementation of their software that are not specific to any one client or regulatory environment. Hazen can provide oversight of that process to ensure the District's organization, processes and rules are supported by the software and that job specific training is performed.

700. Solution Implementation Support

This task includes support for the organizational changes, new responsibilities, and ways of working WCWCD staff will experience. Deliverables for oversight of the vendor will be approvals of software configuration, documentation, and training.

Phase 2 Task Descriptions

Task 110 Project Management and Implementation Oversight

Hazen's Project Manager will be responsible for coordinating with WCWCD, responding to questions, providing project updates, and overall team coordination. The PM will be accountable to WCWCD to ensure scope, schedule and budget expectations are met and invoices submitted per WCWCD specifications. The PM will coordinate Hazen staff to meet the needs of WCWCD.

If off-the-shelf software is selected for the PDS, the product vendor will be responsible for implementation of the software as agreed with WCWCD. Hazen will provide project support and change management services for the implementation to ensure the selected software is implemented per the requirements and priorities defined by WCWCD.

***Task 110 Deliverables**:*

- *bi-weekly status updates (progress meetings)*
- *status meetings*
- *monthly invoices*
- *meeting notes and action items*

Task 500 Project Planning Process Workshops

The WCWCD team has expressed interest in facilitated workshops to prepare Project Managers and staff to set up projects in a standard format that streamlines project planning and captures data required for performance monitoring and control. This task will begin with definition of stakeholders and key performance indicators (KPIs) for different types of projects. Hazen will facilitate face-to-face process definition workshops to work through the details of project planning and setup. The following list of workshops will be held to define standard forms, checklists, and end-to-end workflows to enable the framework planning tasks as defined in Phase 1. Hazen will provide subject matter expertise and example forms, checklists, or workflows for each category of project processes.

510 Performance Management Workshop

Hazen will provide a best practice recommended list of Key Performance Indicators (KPIs) for WCWCD leadership to review. A project performance management workshop will then be held to finalize the KPIs for each group of key stakeholders. The recommended KPIs will be provided to start the discussion and expedite the finalization process. The workshop participants will develop a vision for the "ideal" KPI dashboard.

This will ensure that projects are set up to capture the data required to monitor progress and performance.

520 Process Management Workshops

The KPIs will provide insight into required data to be captured in forms, checklists, and workflows. Five (5) additional workshops will be held following performance management to work through additional tasks in the planning phase of the PDS Framework. These additional workshops include:

1. Budget Workshop – to setup projects for budget and cost tracking
2. Regulatory (i.e. National Environmental Policy Act (NEPA) and permitting) Workshop – to setup projects to ensure permits and regulations are identified and complied with
3. Property & Right-of-Way (ROW) Workshop – to provide checklists for property and/or ROW purchase and management
4. Contractual Change (i.e. scope, schedule, budget) Workshop – to define forms and workflows for proposal, approval and tracking of contract changes
5. Technical Specifications Workshop – define the standard format of digital deliverables (i.e. BIM, CAD, GIS, and SCADA) to ensure accuracy of technology deliverables.

Task 500 Deliverables:

- *Example materials*
- *Workshops*
    - *Performance management*
    - *Budget setup and tracking*
    - *Regulatory compliance and tracking (i.e. NEPA and permitting)*
    - *Contractual change (i.e. scope, schedule, budget, and change orders)*
    - *Property and Right-of-Way*
    - *Technology specifications (i.e. BIM, CAD, GIS, and SCADA)*
- *Workshop notes*
- *Performance dashboard conceptual vision - wireframe*
- *Forms & checklists*
- *Process diagrams*

Task 500 Assumptions:

- *Workshops can be scheduled so all workshops can be completed on-site in 2 trips of 2 days each trip*
- *The performance dashboard concept will be an illustration to be implemented either in the new PDS software or as a separate scope item*
- *Process diagrams will be based on manual processes with expectation that if they need updating it will be within the PDS software training materials*

Task 600 Finalized Requirements and System Selection

There are several good project and construction management software products available, and Hazen will provide insight as to their strengths, weaknesses, and limitations. The approach will be to leverage existing resources and investments first, then recommend proven commercially available software before developing custom solutions.

In this task, Hazen will prepare final documentation of the requirements, processes, and technical conditions to inform an RFQ and/or software demonstrations.

610 Industry Research & Qualification Demos

The Hazen Team will continue to review available software products and custom options and will schedule several high-level screenings of the products to get to a short list of up to four (4) products for a more detailed evaluation. The Hazen team will contact other utilities as needed for them to share their experiences with the products.

620 Requirements Finalization

Hazen has documented a framework, tasks, roles, and responsibilities based on Phase 1 workshops.

This task will result in finalization of the PDS requirements to ensure the system meets current and future needs. The requirements are generally divided into three main categories that will be documented, reviewed, and finalized as part of this task:

a. **Project Delivery Framework** – WCWCD project delivery structure to be enabled by the PDS solution, including phases, tasks, and responsibilities.
b. **Functional Requirements** – the solution's complete capabilities with respect to supporting business processes, performing project management functions, and providing features for productive system use.
c. **Technical Requirements** – the standards, interfaces and supporting technologies required to make the PDS solution an effective system within WCWCD's technology environment. Items like security, compliance, reliability, complexity, configurability, and integrability will be considered.

630 System Interview Support

Hazen will facilitate interviews of short-listed software vendors. A standard script will be provided to short-listed vendors performing demonstrations of their software. This script ensures the district's priorities and critical functions are the focus of the demonstrations and that the selection committee can easily assess the packages against each other. A standard scoring system will be established for the software evaluation process to provide quantifiable comparisons.

640 System Selection Support

The vendor of the software package scoring highest will be contacted to negotiate a contract to deliver the software and/or services. If commercial software is not deemed to be the best solution, Hazen will provide options for custom development and separate scope and fee.

Task 600 Deliverables:

- *requirements documentation*
- *software screening criteria*
- *software preliminary screenings*
- *shortlist of products for further evaluation and demonstration*
- *interview script*
- *selection scoring criteria*
- *meeting notes and illustrations*

Task 600 Assumptions:

- *WCWCD procurement will manage the bid and contract execution process*
- *Hazen will support the software selection process but not score or select the vendor*

Phase 3 Task Descriptions

Task 700 Solution Implementation Support

This task will focus on implementation of the solution identified and selected in Task 4. Effort for this task assumes that a commercially available product is selected, and Hazen will support WCWCD by overseeing setup, configuration, and training in an owner's advisor role.

710 Implementation Support

Hazen will facilitate configuration sessions to implement each functional component and ensure it matches workflows and processes developed in Phase 1 before promotion to production status.

720 Organizational Change Management

Hazen will work with District leadership to build a communication plan to facilitate the rollout of the new software and processes. Hazen will also facilitate through regular check-ins with key stakeholder groups, identification of concerns and areas of resistance to address with additional support or training.

730 Training Support

Hazen will support software training performed by the vendor and initial use of the software to facilitate proper use of the solution.

740 Vendor Management Support

Hazen will work with the selected vendor to ensure ongoing support is provided for the software implemented. An adoption period of hyper support from Hazen and the vendor will be provided the first couple weeks of full production.

Task 700 Deliverables:

- Facilitation of configuration sessions
- Approval of configuration and testing
- Organizational change management communication and training support
- Consulting support for management the software vendor
- Additional support for the initial 2 weeks of production

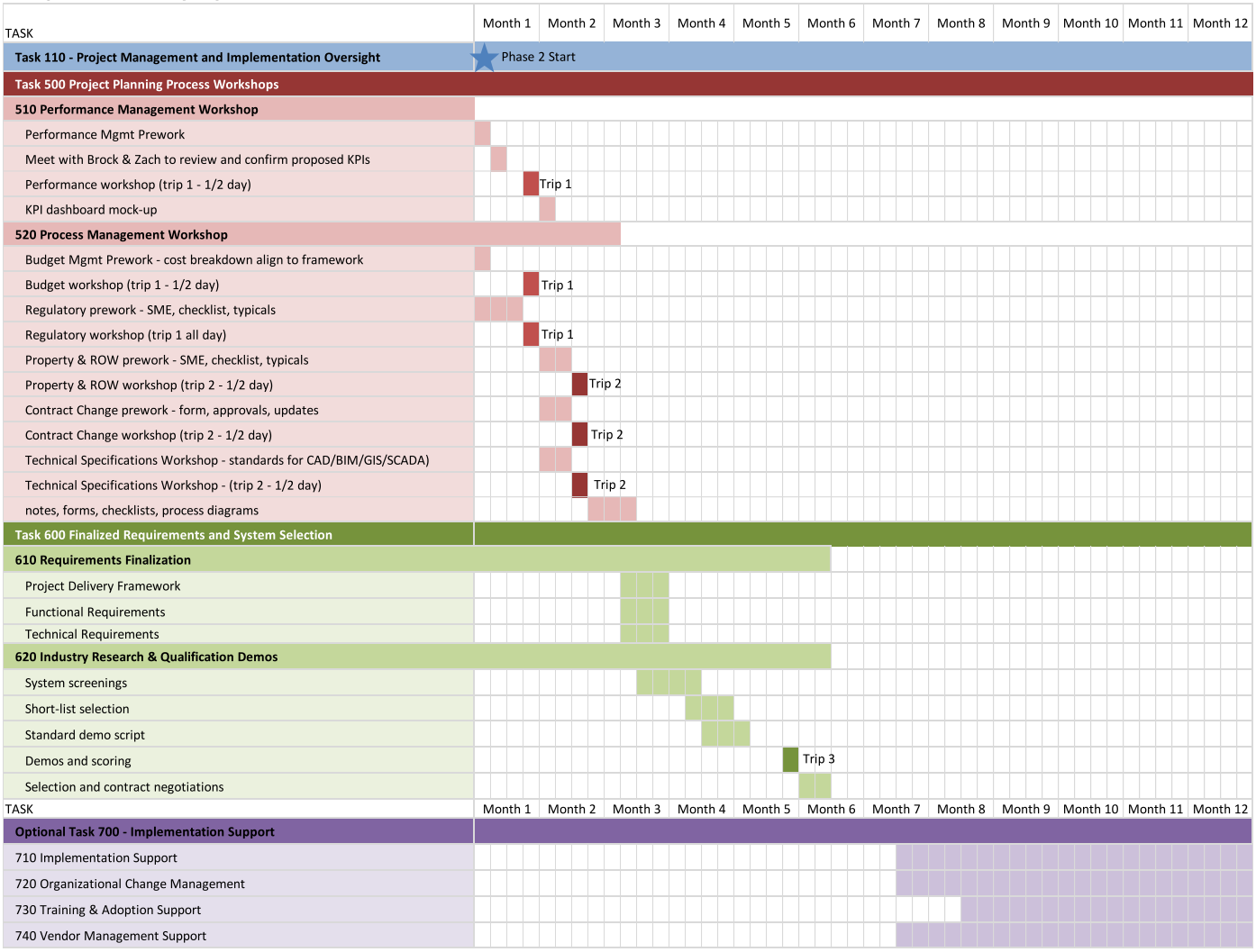
Task 700 Assumptions:

- The contracted software provider will be responsible for implementation of the software, documentation, training, and support.
- Hazen will provide management support as requested by WCWCD up to 200 hours of labor.

SCHEDULE

The following figure shows a best case conceptual schedule for the project. Actual timing of trips, demos and presentations will be coordinated with District staff.

Project Delivery System



SCHEDULE OF VALUES

The fee estimate for this effort is shown in the attached table. Payment shall be hourly not-to-exceed, invoiced monthly on a time-and-expense basis. Other Direct Expenses (ODCs) and travel will be billed to the project at cost.

Hazen	Williams, Jeremy	Stanford, Ben	Sipes, Shelly	Nagel, Ryan	Blair Adams	Dashiell, Shelbie; Brooklyn Hall	Dylan Butler	Kearl, Brenda		Hazen				
	Project Director	PDS Lead	PM	QA/QC	Sr. Bus. Mgmt	PDS Spclst	Principal Data Engineer	Subject Matter Experts	Admin	Labor Hours	Labor Cost	ODC's	Subtotal	Total
	$295	$325	$295	$350	$295	$195	$175	$300	$95					
PHASE 2														
Task 110 Project Management														
110 Project Management & Implementation Over	8	8	48	8	24				12	108	$ 30,140		$ 30,140	**$ 30,140**
Task 110 SUBTOTAL	**8**	**8**	**48**	**8**	**24**	**0**	**0**	**0**	**12**	**108**	**$ 30,140**	**$ -**	**$ 30,140**	**$ 30,140**
Task 500 Project Planning Process Workshops														
510 Performance Management Workshop (1)	4	8	8	2	8	16				46	$ 12,320		$ 12,320	**$ 12,320**
520 Process Management Workshops (5)	20	40	40	10	40	64	32	40		286	$ 76,080		$ 76,080	**$ 76,080**
Travel - 2 trips										0	$ -	$ 10,120	$ 10,120	**$ 10,120**
Task 500 SUBTOTAL	**24**	**48**	**48**	**12**	**48**	**80**	**32**	**40**	**0**	**332**	**$ 88,400**	**$ 10,120**	**$ 98,520**	**$ 98,520**
Task 600 Requirements & System Selection														
610 Requirements Finalization	4	16	16	4	16	40	20		4	120	$ 28,900		$ 28,900	**$ 28,900**
620 Industry Research & Qualification Demos	4	20	20	4	20	40	80	8		196	$ 45,080		$ 45,080	**$ 45,080**
630 System Interview Support	4	20	20	4	20	20	20	8	4	120	$ 31,060		$ 31,060	**$ 31,060**
640 System Selection Support	4	4	4	4	4		4			24				
Travel - 2 trips										0	$ -	$ 10,120	$ 10,120	**$ 10,120**
Task 600 SUBTOTAL	**16**	**60**	**60**	**16**	**60**	**100**	**124**	**16**	**8**	**460**	**$105,040**	**$ 10,120**	**$115,160**	**$115,160**
PHASE 2 TOTAL	**48**	**116**	**156**	**36**	**132**	**180**	**156**	**56**	**20**	**900**	**$223,580**	**$ 20,240**	**$243,820**	**$243,820**
PHASE 3														
Task 700 Solution Implementation Support														
710 Implementation Support	4	8	8	2	8	8	8	8	4	58	$ 14,940		$ 14,940	**$ 14,940**
720 Organizational Change Management	4	8	8	2	8	8	8	24		70	$ 19,360		$ 19,360	**$ 19,360**
730 Training Support	2	8	8	2	8	8	8			44	$ 11,570		$ 11,570	**$ 11,570**
740 Vendor Management Support	4	8	8		8					28				
Travel - 2 trips										0	$ -	$ 10,120	$ 10,120	**$ 10,120**
TASK 700 SUBTOTAL	**14**	**32**	**32**	**6**	**32**	**24**	**24**	**32**	**4**	**200**	**$ 45,870**	**$ 10,120**	**$ 55,990**	**$ 55,990**
PHASES 2&3 PROJECT TOTAL	**62**	**148**	**188**	**42**	**164**	**204**	**180**	**88**	**24**	**1100**	**$269,450**	**$ 30,360**	**$299,810**	**$299,810**

Water Conservation Programs

ALL TABLES

APPLICATIONS | TASKS | IMPACT FEE EASEMENTS | HOA DATABASE | BOWEN COLLINS TURF ANALYSIS | PLANTS | SCHOOLS | UTAH TECH LOCATIONS | MORE (14)

NEW APPLICATION | Search for keywords...

Dashboards

- Conservation Control Center
- Conservation Staff Dashboard
- Group Query
- Public Affairs Dashboard
- Work Days Timing

Recent Views

- Final Documents Sent
- New Applications
- Payment Completed
- Payment Processing

Welcome to the WELP Database!

Totals

PRINT | SEND

2338 Applications Submitted	1094 Completed Projects	1,432,496 Square Footage of Turf Removed	$ 2,640,600.00 Total Amount Paid
3,384 Site Visits Conducted	$ 1.89 Per square foot average	1,599.60891 Average Project Size	64,462,320 Gallons Gallons Saved Annually
197.832 Acre Feet of Water Saved Annually	335.306 Households Households Supported (by Gallons Saved)	691 Projects in Progress	180.886 Miles Distance an 18 inch roll of sod would span

24.864 Football Fields

of equivalent lawn replacement

Approve for Payment

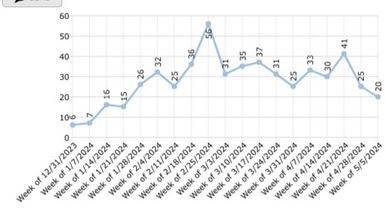
NEW | CUSTOMIZE

Action	Unique Name	Parcel ID	Owner Listed on Assessor	Ownership	Box	Final Square Footage	Final Rebate Amount	Full Property Address	Full Mailing Address	Requested By	Approved By

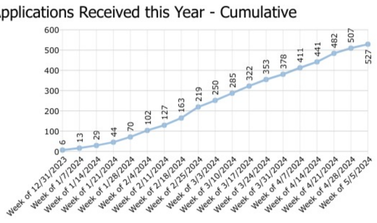
There are no records to show

Applications Received this Year

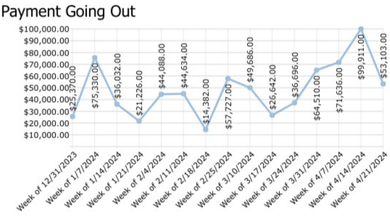
PRINT | EXPORT | SEND



Applications Received this Year - Cumulative

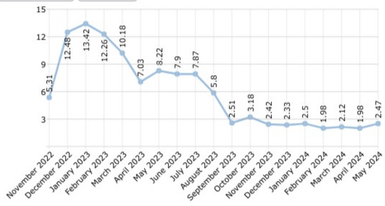


Payment Going Out

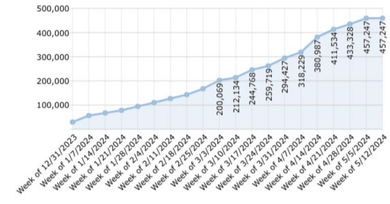


Days from Application Received to Approved

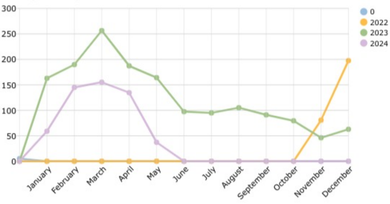
PRINT | EXPORT | SEND



The Climb to 2 Million Square Feet of Turf Removed



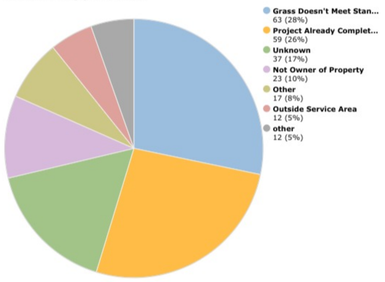
Yearly Comparison



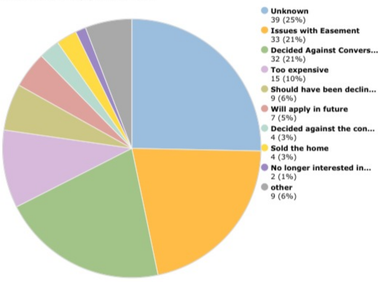
Reviewed Impact Fee Easements

1089 Easements Reviewed	761 Compliant Easements	153 Noncompliant Easements	42 Violating Owners who Signed the Document
$4,134,412.98 Money Owed by Violators	$27,022.31 Average Impact Fee Owed		

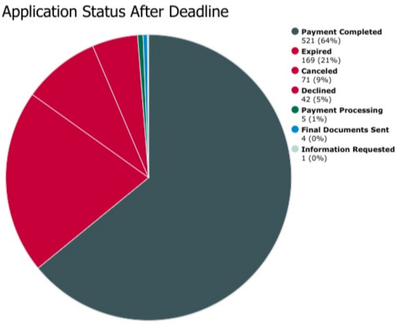
Declined Applications



Cancelled Applications



Application Status After Deadline



Font: a A

WASHINGTON COUNTY
WATER
CONSERVANCY
DISTRICT

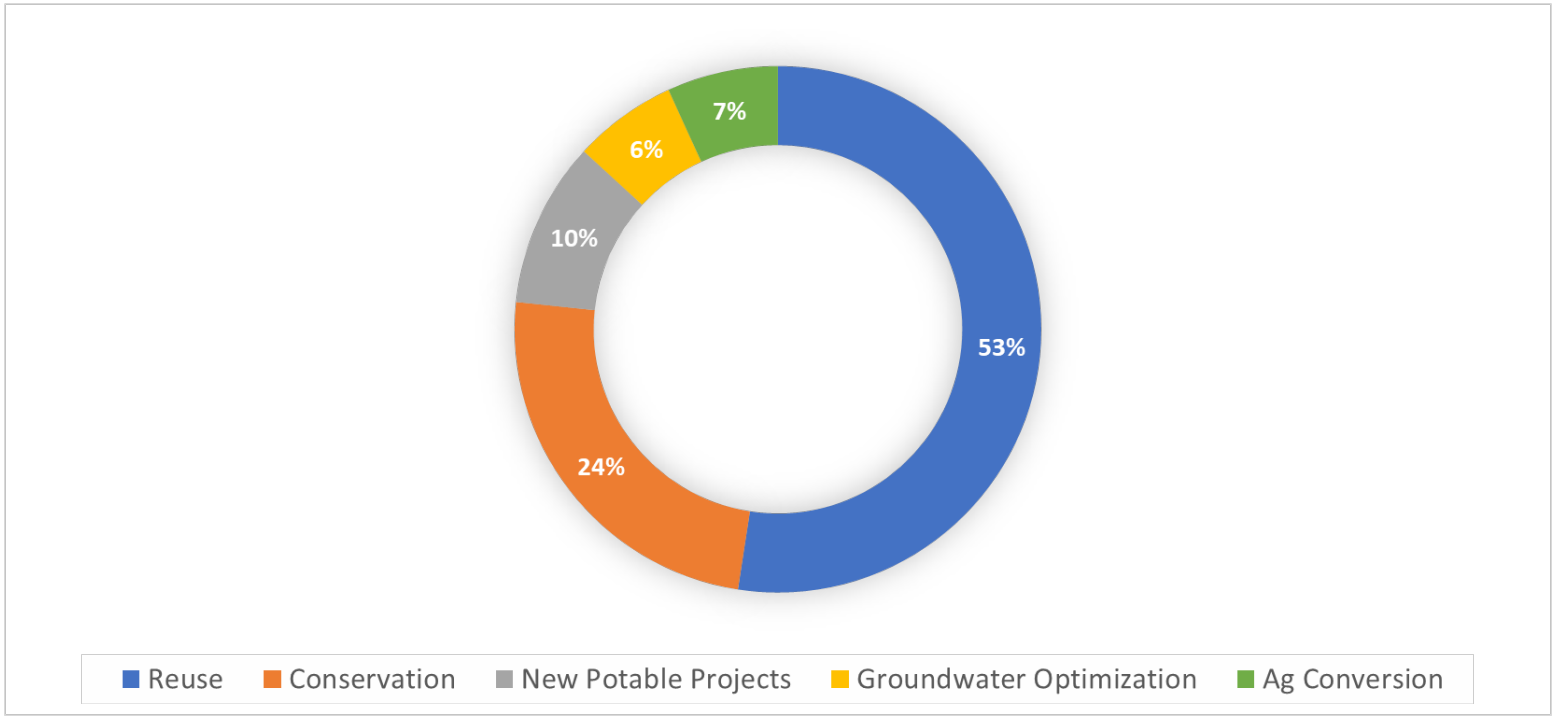
Regional Reuse System

WCWCD Board Meeting

May 6, 2024

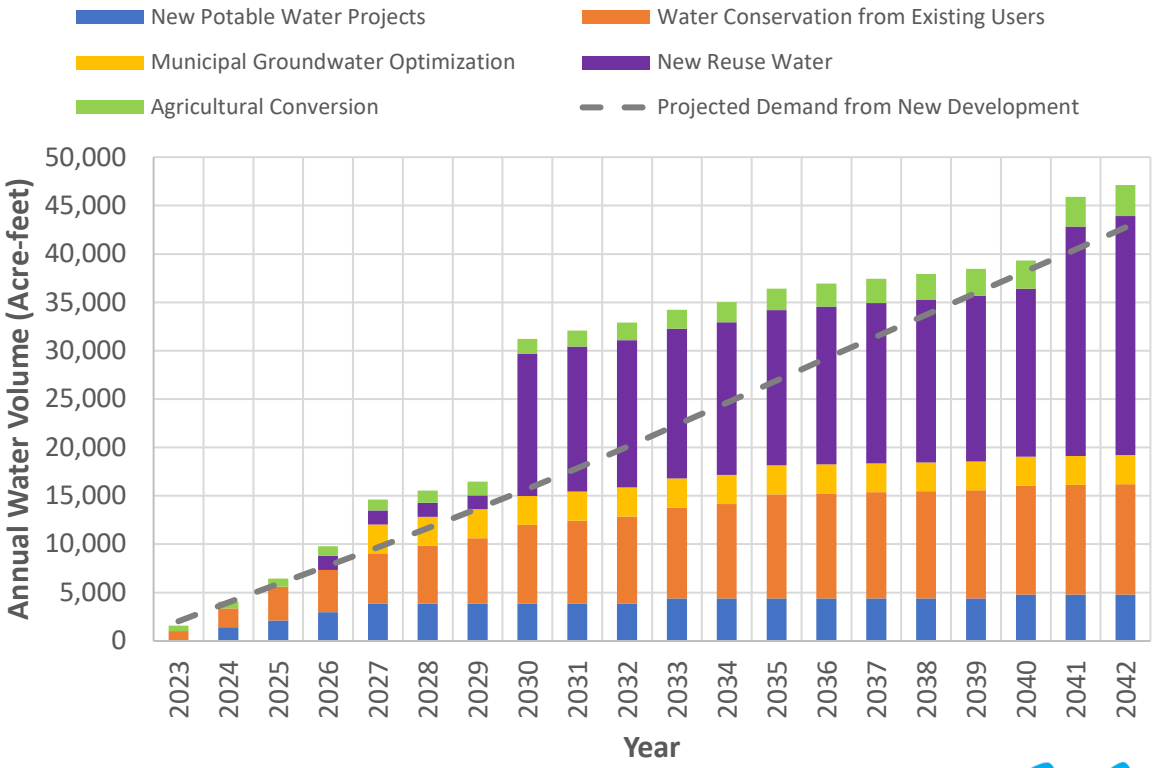
Project Update

20-Year Water Supply Plan Sources

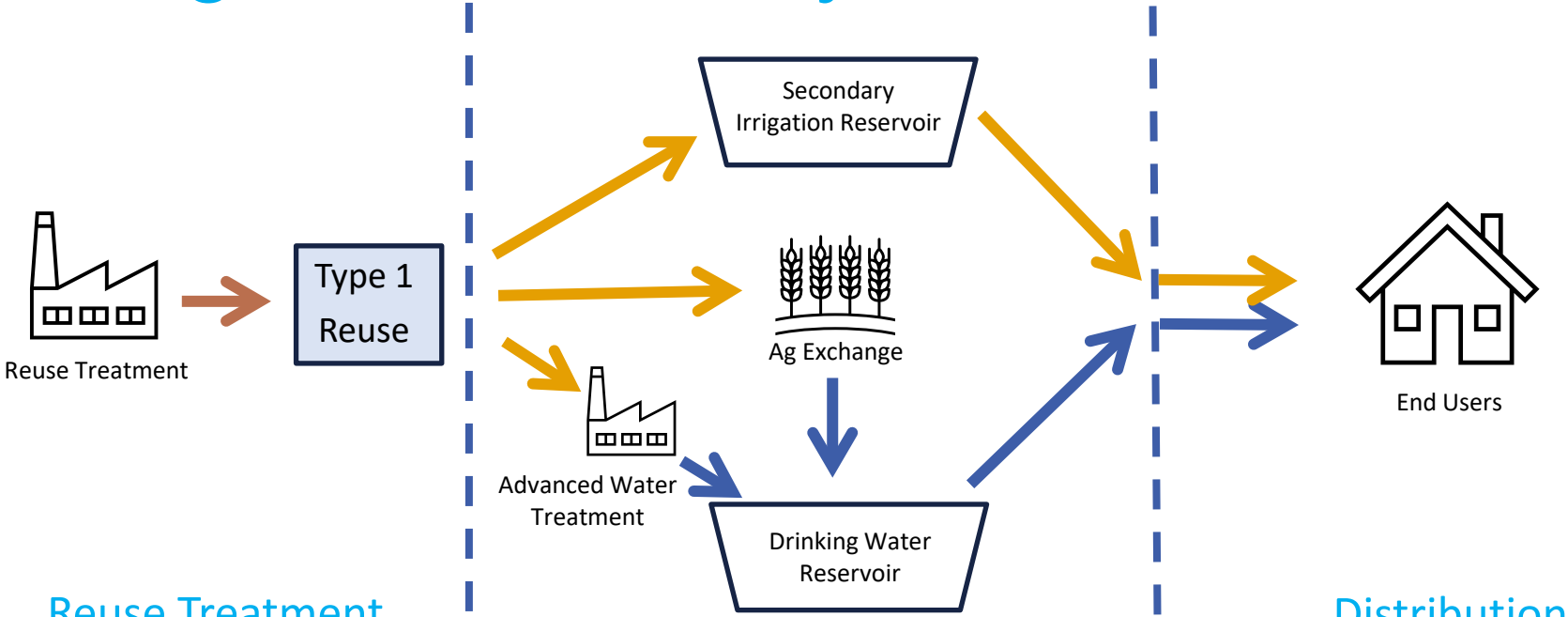


Yields

New Water Supplies	Estimated Annual Yield (AFY)
Conservation	11,421
Reuse	24,716
Potable Projects	4,787
Groundwater Optimization	3,000
Ag Conversion to M&I	3,216
Total New Water	**47,141**
Total Volume Required for 20-Year Growth	**42,746**
Water Supply Surplus	**4,395**



Regional Reuse System



Reuse Treatment

St. George City

Ash Creek SSD

Conveyance/Storage/
Advanced Treatment

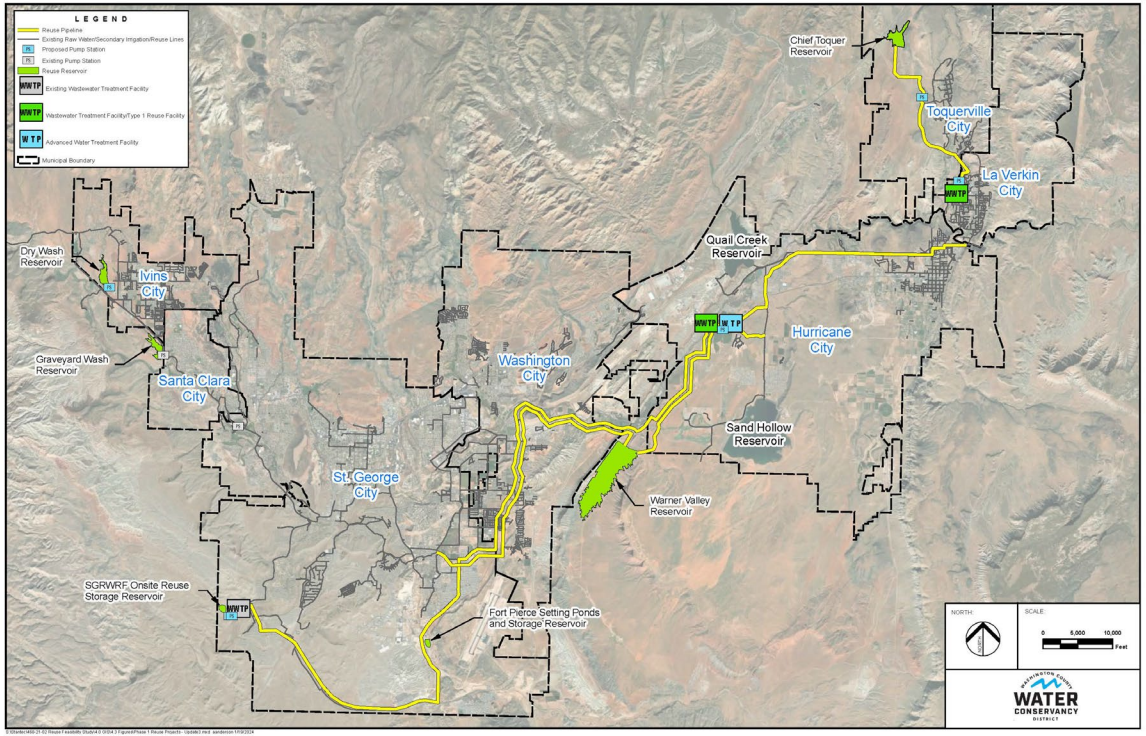
WCWCD

Distribution

RWSA Partners

Regional Reuse System

- Components
  - New and expanded treatment plants
  - 60 miles of pipeline
  - 4 new reservoirs
  - 5 pump stations
- Estimated 24,000 AFY
- Estimated $1+ billion



Projects

Component Type	Component	Description	Owner
Treatment	SGRF Upgrade	Upgrade SGRF Type I technology to allow 14 MGD of capacity	St. George
	SGRF Expansion	Expand SGRF Type I facility capacity an additional 8 MGD (22 MGD total)	St. George
	SGRF Onsite Reuse Pond	Construct 100 acre-foot pond for treatment operational flexibility	St. George
	Ash Creek SSD Type I Reuse Facility	Construct Type I treatment components on future wastewater treatment plant for 7 MGD of capacity	Ash Creek SSD
	Confluence Park Reuse Facility	Construct decentralized wastewater treatment plant for 1.5 MGD of capacity expandable up to 3 MGD	Ash Creek SSD
	Advanced Water Treatment Facility	Treat SGRF and Ash Creek SSD Type I water for IPR for 7 MGD of capacity	Ash Creek SSD
	Potable Reuse Demonstration Facility	Construct 200 gpm demonstration facility of advanced water treatment and brine management processes	Ash Creek SSD
Conveyance	Reuse Forebay	Construct 150 acre-foot centralized Type I reuse storage reservoir	WCWCD
	SGRF to Reuse Forebay Pipeline	Convey reuse water to forebay, ~27 miles	WCWCD
	Reuse Forebay to Warner Valley Reservoir Pipeline	Convey Type I reuse water to Warner Valley Reservoir, ~4 miles	WCWCD
	Warner Valley Outlet Pipeline	Convey Type I reuse water from Warner Valley into RWSA Service Area, ~10 miles	WCWCD
	Reuse Forebay to Quail Creek Ag Exchange Pipeline	Convey Type I reuse water to Hurricane/La Verkin area for agricultural supply exchange, ~10 miles	WCWCD
	AWT to Quail Creek Pipeline	Convey IPR water to Quail Creek/Sand Hollow reservoirs, ~1 mile	WCWCD
	Chief Toquer to TSWS Pond Pipeline	Convey secondary water to TSWS pond, ~2 miles	WCWCD
	CPWRF to TSWS Pipeline	Convey Type I reuse water to TSWS pond, ~4 miles	WCWCD
	Fort Pearce Pond and Desilting Basins	Construct desilting facility and 250 acre-foot distribution storage reservoir	WCWCD
Storage	Dry Wash Reservoir	1,500 acre-foot secondary irrigation reservoir	WCWCD
	Graveyard Wash Reservoir	1,900 acre-foot secondary irrigation reservoir	St. George
	Chief Toquer Reservoir	3,700 acre-foot secondary irrigation reservoir	WCWCD
	Warner Valley Reservoir	Up to 55,000 acre-feet of secondary irrigation reuse water storage	WCWCD

Benefits

ENVIRONMENTALLY SOUND

SAFE

RELIABLE

LOCALLY CONTROLLED

DROUGHT RESILIENT

Funding

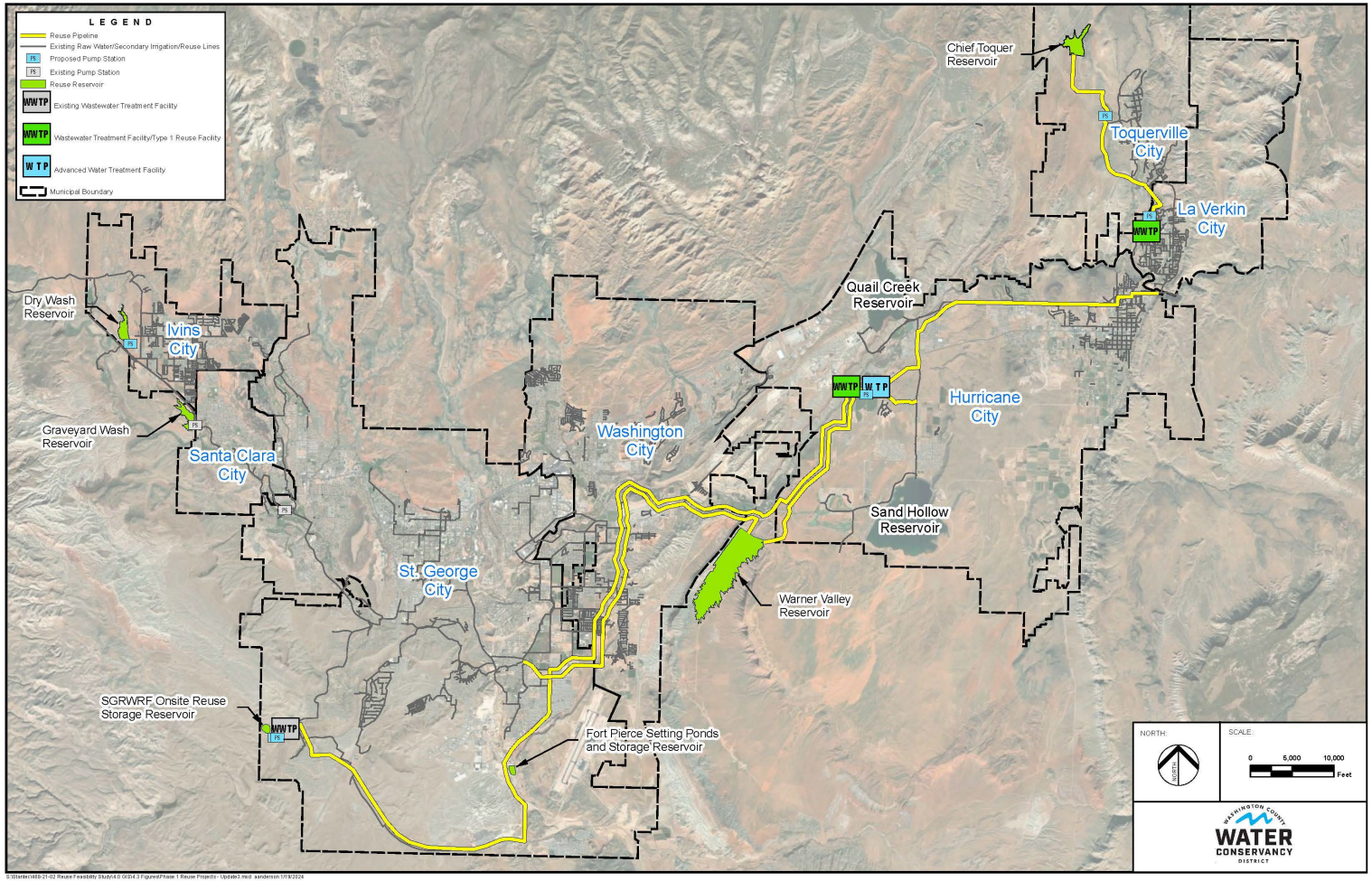
Amount	Reuse Component	Funding Agency	Match	Deadline
$1.4 million	Regional Reuse System	Bureau of Reclamation	$5.4 million	2025
$11.7 million	Chief Toquer Reservoir	Bureau of Reclamation	$46.9 million	2026
$5 million	Ash Creek Project	Washington County	n/a	2026
$5 million	Chief Toquer Reservoir	Department of Water Quality (DWQ)	$16 million	2026
$2.4 million	Dry Wash Reservoir	DWQ	$7.6 million	2026
$1.9 million	Graveyard Wash Reservoir	DWQ	$8.9 million	2026
$1.7 million	Confluence Park Water Reclamation Facility	DWQ	$2.4 million	2026
$20.5 million (applied)	Regional Reuse System	Bureau of Reclamation	$82.2 million	2026

Owner Advisor

Recommendation

- Approve the Regional Reuse System Owner Advisor Annual Workplan with Stantec for $4,289,500 subject to an agreement approved by staff

Conveyance Preliminary Design


LEGEND
Reuse Pipeline
Existing Raw Water/Secondary Irrigation/Reuse Lines
Proposed Pump Station
Existing Pump Station
Reuse Reservoir
WWTP
Existing Wastewater Treatment Facility
WWTP
Wastewater Treatment Facility/Type 1 Reuse Facility
W T P
Advanced Water Treatment Facility
Municipal Boundary
Chief Toquer Reservoir
Toquerville City
La Verkin City
Quail Creek Reservoir
Dry Wash Reservoir
Ivins City
Graveyard Wash Reservoir
Santa Clara City
Washington City
Hurricane City
Sand Hollow Reservoir
St. George City
Warner Valley Reservoir
SGRWRF Onsite Reuse Storage Reservoir
Fort Pierce Setting Ponds and Storage Reservoir
NORTH:
SCALE:
0 5,000 10,000
Feet
WASHINGTON COUNTY WATER CONSERVANCY DISTRICT

Recommendation

- Approve the Engineer Agreement with Bowen Collins & Associates for the Regional Reuse System Preliminary Design Report for $1,405,245

Reuse Authorization Contracts

Reuse Authorization Contracts

- Treatment
  - Ash Creek Special Service District
  - St. George City
- Delivery
  - Municipal Partners (separate agreements with each)
- Reuse exchange
  - Irrigation and canal companies (separate agreements with each)

Recommendation

- Approve the Authorization Contract for Treatment of Domestic Wastewater Effluent with Ash Creek Special Service District
- Approve the Reuse Authorization Contract with La Verkin City
- Approve the Reuse Authorization Contract with Toquerville City

USGS Joint Funding Agreement

2024 Scope of Work

- Sand Hollow aquifer recharge work
- Urban recharge impact on Virgin River
- Hildale Groundwater Development Project
- Apple Valley Groundwater Investigation

USGS Joint Funding Agreement

Sand Hollow aquifer recharge

- $34,500 WCWCD
- $15,500 USGS

USGS Joint Funding Agreement

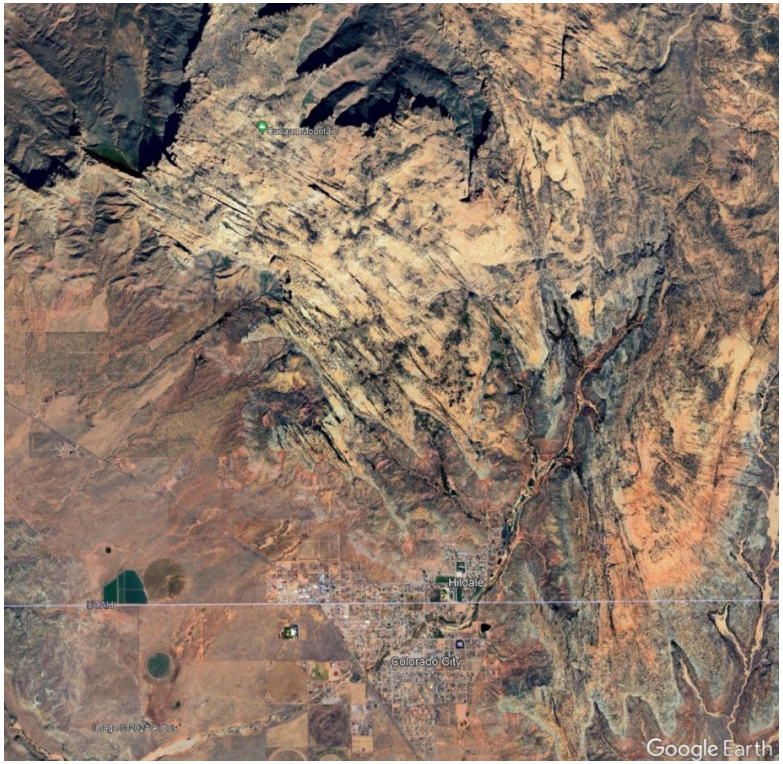
Urban return flow impact on Virgin River

- $41,400 WCWCD
- $18,600 USGS

USGS Joint Funding Agreement

Hildale Groundwater Development Project

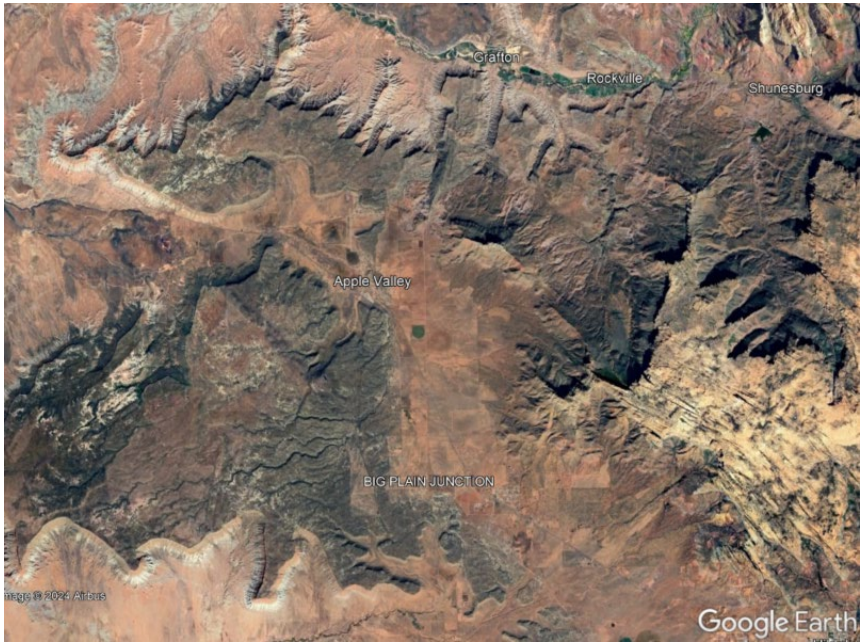
- $48,300 WCWCD
- $21,700 USGS



USGS Joint Funding Agreement

Apple Valley Groundwater Investigation

- $34,500 WCWCD
- $15,500 USGS



Ivins Filter Station Replacement Filters

Ivins Filter Station Replacement Filters

- Flowrates up to 7,000 gallons per minute
- Stainless steel with 500-micron wedge wire screen

Ivins Filter Station Replacement Filters

Bid Tabulation

Bidder	Bid
Scholzen's Products	$124,024.44
Sprinkler Supply Co.	$124,649.36
Turf Equipment and Irrigation	$129,456.00
Mountainland Supply Company	$143,301.13