

**REGULAR BOARD MEETING
CANYON REGIONAL WATER AUTHORITY
Monday September 11, 2023, at 6:00 PM
850 Lakeside Pass, New Braunfels, TX 78130**

**This meeting is to be conducted in person only at the Canyon Regional Offices located at
850 Lakeside Pass, New Braunfels, Texas**

This Notice is posted pursuant to the Texas Open Meeting Act (Chapter 551, Texas Government Code). The Board of Trustees of Canyon Regional Water Authority (CRWA) will hold a meeting in person at 6:00 P.M., Monday September 11, 2023, in the Board Room. The public may observe this meeting in person. Additional information can be obtained by calling: (830) 609-0543. The CRWA Board of Trustees may consider, discuss, and take action on any of the matters identified below.

Item 1 CALL TO ORDER

Item 2 BOARD ROLL CALL

Item 3 INVOCATION AND PLEDGE OF ALLEGIANCE

Item 4 OATH AND STATEMENT OF OFFICE OF NEW TRUSTEE

Item 5 PUBLIC COMMENTS

- A. Comments on non-agenda items - no discussion from the Board, 3-minute time limit.
- B. Comments on specific items on this agenda – discussion from/with the Board may be allowed; 3-minute time limit per citizen. Time may not be “shared or ceded” to another citizen.

Members of the public wishing to make public comment during the meeting must register by emailing hdiaz@crwa.com prior to the meeting. Written comments may also be submitted. If you wish to speak, please state your name.

Item 6 CONSENT ITEMS

All items listed below are considered to be routine and non-controversial by the Board and will be considered by one motion. There will be no separate discussion of these items unless a Board member so requests, in which case the item will be removed from the consent agenda and will be considered as part of the order of business.

- A. CRWA 23-09-050
Adopt Resolution 23-09-050 approval of Board of Trustees meeting minutes of August 14, 2023
- B. CRWA 23-09-051
Adopt Resolution 23-09-051 approval of July 2023 Financial Report and Check Register Report until audited

Item 7 PRESENTATIONS/DISCUSSIONS

- A. Hays Caldwell Wheeling Agreement Notice
- B. County Line Pipeline Project Notice and Demand Letter
- C. October 9 Board Meeting (Columbus Day)

Item 8**CRWA STAFF REPORTS**

(Updates from written reports by staff, legal counsel, and others)

- A. Drought report
- B. Water treatment, Storage, and Transmission operations ~ *Staff*
 - o Lake Dunlap WTP:
 - Production
 - Taste and Odor
 - PFAS test results
 - SOQs for Engineering Design Services
 - o Hays Caldwell WTP:
 - Production
 - Pall mobile membrane filtration
 - o Wells Ranch WTP:
 - Production
 - PFAS test results
 - Well rehabilitation and pump repairs
- C. Wells Ranch III Project ~ *Staff*
 - o Draft Water Supply and Treatment Contract
 - o Groundwater leasing and permitting
- D. South Texas Regional Water Planning Group – Region L ~ *Staff*
- E. Groundwater Districts of Guadalupe and Gonzales Counties ~ *Staff*
- F. Legal and legislative matters ~ *Legal Counsel and Staff*

Item 9**CRWA COMMITTEE REPORTS**

Budget Committee: Comments and Update on Draft FY 2024 Budget ~ *Committee Chairwoman*

Policy and Legislative Committee: Comments and Updates on CRWA Policies ~ *Committee Chairman*

Construction Committee and Reports on Matters Related to CRWA Construction/Infrastructure Projects:

- A. Project Status Comments and Updates on Committee Activity ~ *Committee Chairman*
- B. Project updates from and written reports by engineering consultants, staff, and others:
 - o Alliance Regional Water Authority participation ~ *Alliance*
 - o Geographic Information System (GIS) ~ *Staff and UEG*
 - o TxDOT/CRWA IH-10 (Santa Clara & Zuehl) Pipeline Encasement ~ *Staff and UEG*
 - o TxDOT/CRWA FM 1518 Transmission Line Project ~ *Staff and UEG*
 - o CRWA Standards and Specifications ~ *Staff and UEG*
 - o TxDOT/Hays County/Crystal Clear/CRWA FM 621/CR 266 Water Line Relocation Project ~ *Staff*
 - o CRWA Master Plan update ~ *Staff*
 - o Wells Ranch III WTP Optimization and Conceptual Pipeline Designs ~ *Trihydro Engineering*
 - o Hays Caldwell WTP Facility Improvements:
 - Membrane filter replacement ~ *Staff*
 - Exterior to Filter Building status report on approvals, funding, and construction ~ *Ardurra*

Item 10**GENERAL BUSINESS**

- A. CRWA 23-09-052 Concerning approval of FY 2024 Budget (CRWA Board Treasurer and Staff)
Adopt Resolution 23-09-52 approval of CRWA FY 2024 Budget
- B. CRWA 23-09-053 Concerning approval of Engineering Services Agreement with Ardurra Group, Inc. (CRWA Staff)
Adopt Resolution 23-09-53 approval of a partial engineering scope of work with Ardurra Group, Inc. ("Ardurra") for preliminary design services of the Hays Caldwell WTP Membrane Improvement Project for a cost not to exceed \$110,528.00 and approve a corresponding reimbursement resolution.
- C. CRWA 23-09-054 Concerning approval of a Contract with RAM Utilities, LLC for the FM 1518 Transmission Line Relocation Project (CRWA Staff)
Adopt Resolution 23-09-54 approval of a construction contract with RAM Utilities, LLC for the TxDOT/CRWA FM 1518 transmission line relocation project at a cost not to exceed \$731,420.79.
- D. CRWA 23-09-055 Concerning approval of a Contract with NewGen Strategies & Solutions (CRWA Staff)
Adopt Resolution 23-09-55 approval of a contract with NewGen Strategies & Solutions to develop an analysis of fixed cost blending for Lake Dunlap and Wells Ranch Operating Expenses at a cost not to exceed \$17,500.00.
- E. CRWA 23-09-056 Concerning approval of additional Life Insurance Benefits through TCDRS (CRWA Staff)
Adopt Resolution 23-09-56 approval of additional life insurance benefits for CRWA employees through TCDRS at a rate of 0.17% of wages. This cost is included in the FY 2024 Budget for a total of \$3,413.00.
- F. CRWA 23-09-057 Concerning a New Rate Methodology for Hays Caldwell Participating Members (Trustee Doris Steubing)
Adopt Resolution 23-09-57 to take appropriate action regarding the Amended and Restated Regional (Hays/Caldwell Counties Area) Water Supply and Treatment Contract, made effective February 9, 2021, including but not limited to, directing CRWA staff to develop a new rate methodology for Participating Members who exceed their annual allotment of water under the Contract.

Item 11 EXECUTIVE SESSION

The Board of Trustees will meet in a closed session to discuss the following items pursuant to Chapter 551 of the Texas Government Code, including, where appropriate, Sections 551.071, 551.072, 551.074, 551.076, 551.086, 551.089, and 418.183(f) of the Texas Government Code.

- A. Meet and consult with Attorney in private as permitted by Section 551.071 of the Texas Government Code to seek advice upon and discuss: *No items.*

Item 12 RETURN TO OPEN MEETING

The Board may consider, deliberate, and take action on the items discussed in Executive Session.

Item 13 FUTURE BOARD MEMBER AGENDA ITEMS**Item 14 Adjourn the meeting**

NOTICE: The Board of Trustees may meet in a closed session to discuss any item listed above pursuant to Chapter 551 of the Texas Government Code, including, where appropriate, sections 551.071, 551.072, 551.074, 551.076, 551.086, 551.089, and 418.183(f) of the Texas Government Code. All deliberations and formal action will occur in open session.

September 1, 2023

County Line Special Utility District
Attn: Toni Brewer, President
8870 Camino Real
Uhland, Texas 78640

Dear President Brewer,

I, Doug Schnautz, hereby resign from my position as the County Line Special Utility District's appointee to the Canyon Regional Water Authority Board of Trustees, effective immediately.

Sincerely,

A handwritten signature in dark ink, appearing to read "Doug Schnautz", with a stylized flourish at the end.

Doug Schnautz

cc:

Humberto Ramos, General Manager, County Line Special Utility District
David Klein, General Counsel, County Line Special Utility District
Danielle Lam, General Counsel, County Line Special Utility District

RESOLUTION OF THE GOVERNING BODY OF

COUNTY LINE SPECIAL UTILITY DISTRICT

APPOINTING TO CANYON REGIONAL WATER
AUTHORITY ONE MEMBER TO THE BOARD OF
TRUSTEES FOR A 2-YEAR TERM OF OFFICE.

ADOPTED August 21, 2023

RESOLVED, that the Governing Body of County Line Special Utility District has replaced:

Doug Schnautz with Humberto Ramos to serve as their representative to the Board of Trustees of Canyon Regional Water Authority for the remainder of the 2-year term of office that expires in May 2024, effective immediately.

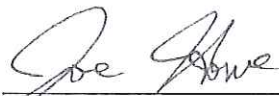
RESOLVED, FURTHER, that Humberto Ramos is authorized to represent, and act on behalf of, in the best interest of above said entity in the process of maintaining and conducting the business of the Canyon Regional Water Authority, and to cast its vote on all issues related to the Canyon Regional Water Authority.

* * * * *

CERTIFICATE OF SECRETARY

I, Joe Howe, do hereby certify that I am the Secretary of the above said entity and that the above and foregoing is a true, full and correct copy of the resolution duly adopted by the Members of the Governing Body of the above said entity at its meeting held on August 21, 2023, and entered into the Minutes of said entity; that the meeting was duly and regularly held in accordance with the Bylaws and or laws governing the said entity; and that such resolution has not been rescinded or modified.

To certify which, witness my hand this day **August 21, 2023**



Joe Howe
Secretary, Board of Directors
County Line Special Utility District

**CANYON REGIONAL WATER AUTHORITY
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
09/11/2023	CONSENT AGENDA ITEM BOARD OF TRUSTEES MEETING MINUTES OF AUGUST 14, 2023	CRWA 23-09-050

INITIATED BY

JOHN KAUFMAN / FRAN POWERS

STAFF RECOMMENDATION

Approve the Minutes of the Regular Board Meeting of the Board of Trustees held on August 14, 2023, as amended, or not amended.

BACKGROUND INFORMATION

The minutes of the meeting are attached.

FINANCIAL IMPACT

None

MOTION

Motion to approve the following resolution.

AI
for GM

CANYON REGIONAL WATER AUTHORITY

RESOLUTION No. 23-09-050

BE IT RESOLVED that the Minutes of the Regular Meeting of the Board of Trustees held on August 14, 2023, as amended, or not amended, are approved.

Adopted this 11th day of September 2023

Ayes ____ Nays ____ Abstained ____ Absent ____

Approved by: _____
Timothy D. Fousse, CPM
President

Certified and attested by: _____
Doris Steubing
Secretary

**MINUTES
REGULAR BOARD MEETING
CANYON REGIONAL WATER AUTHORITY
BOARD OF TRUSTEES**

Regular meeting:

The Canyon Regional Water Authority (CRWA) Board of Trustees met for a regular meeting in person on Monday, August 14, 2023, at 6:00 p.m.

The following individuals attended the meeting:

Board of Trustees:

Timothy Fousse	Brandon Rohan
Ted Gibbs	Marc Gilbert
Martin Poore	Al Suarez
Gary Gilbert	Steve Cooper
Doug Schnautz	Christina Miller
Theresa Scheel	Steve Fonville
Donald Bosworth	James Forssell
Randy Schwenn	Mabel Vaughn
Doris Steubing	Clint Ellis

CRWA Staff:

John Kaufman	Hanna Diaz
Adam Telfer	Joan Wilkinson
David McMullen	Fran Powers

Board of Managers and Others:

Pat Allen	David Kneuper
Louis Rosenberg	David Rabago
Trey Wilson	Daniel Smith
Byron Sanderfer	Humberto Ramos

Item 1 CALL TO ORDER

» President Timothy Fousse opened the meeting at approximately 6:02 p.m.

Item 2 BOARD ROLL CALL

» Eighteen (18) Board members were present.

Item 3 INVOCATION AND PLEDGE OF ALLEGIANCE

Item 4 PUBLIC COMMENTS

- A. Comments on non-agenda items - no discussion from the Board, 3-minute time limit.
- B. Comments on specific items on this agenda – discussion from/with the Board may be allowed; 3-minute time limit per citizen. Time may not be “shared or ceded” to another citizen.

Members of the public wishing to make public comment during the meeting must register by emailing fran@crwa.com prior to the meeting. Written comments may also be submitted. If you wish to speak, please state your name.

- » Humberto Ramos spoke during the public comments and stated, “I wanted to take this time to thank the Board of Canyon Regional for allowing me to serve CRWA in varying capacities for the last 18 years, six years as a participant and 12 years as an employee, so thank you CRWA. As many of you know I am the new General Manager for County Line SUD. I have come before you to ask you to not lose sight of the unspoken principles that made this organization successful that is inclusion of all. I am glad Converse is here. Inclusion of all board members, all general managers, and all staff of the entities that form CRWA. Let me remind you that no matter how large the entity is, no matter how much water they are contracted for, no voice is louder than the others, and no favoritism should exist. All should be treated equal and all voices matter. Hence the principle of inclusion. Being that may, I formally request Item 9D be tabled for the simple reason that County Line SUD has not had the opportunity to participate in the discussions. There was a meeting held on August 8 which County Line and the City of San Marcos were not a part of. This action item that is presented in the Board packet today is the beginning steps to drive an engineered solution to the membrane issue at Hays Caldwell. Estimation of the construction of the engineered solution is between 8-10 million dollars of which County Line represents 29.27% of the total (2.4-3 million dollars). Therefore, I ask again this item be tabled. Keeping with the principle of inclusion of all, I further ask that when you go into

executive session to address Item 10B you do so with understanding of what the employment contract with John Kaufman states. If you don't have that contract, I ask that you get the contract as soon as possible. The contract states that the annual evaluation will be conducted by the Board of CRWA, not a subset of the Board, but the entire Board. What has transpired thus far is the evaluation of Executive Committee for John Kaufman. Any action regarding an annual evaluation thus far once again excludes County Line and many others of this Board. Not only to mention that John Kaufman has a two-year contract with CRWA and 16 months of the two-year contract have already been expended without an evaluation from this Board. All seated today here have a vested interest in evaluating the General Manager. I would be remised if I did not mention my Board member, Tracy Scheel, has asked on three occasions about the evaluation of Mr. Kaufman and she was not heard. Furthermore, I ask that during the evaluation you include and review all correspondences and actions thus far that address the General Manager such as resolutions by individual entities that have a vote of no confidence, emails of no confidence sent to the General Manager, complaints about the General Manager, and work done by Donald Bosworth that shows four entities have an understanding or opinion that there is a lack of leadership here. I ask that you review emails that show defiance by Mr. Kaufman. I also ask that you remember when Mr. Kaufman was disrespectful and unprofessional to two Board members. Finally, I ask that you look at any other correspondences that may be out there with regards to Mr. Kaufman's tenure here at CRWA. This practice of exclusion in place of inclusion, I'm afraid will continue to divide the organization, degrade the relationships, and ultimately destroy this organization which we all built. Thank you for our time."

Item 5 PRESENTATIONS/DISCUSSIONS

None

Item 6 CONSENT ITEMS

All items listed below are considered to be routine and non-controversial by the Board and will be considered by one motion. There will be no separate discussion of these items unless a Board member so requests, in which case the item will be removed from the consent agenda and will be considered as part of the order of business.

A. CRWA 23-08-044

Adopt Resolution 23-08-044 approval of Board of Trustees meeting minutes of July 10, 2023

B. CRWA 23-08-045

Adopt Resolution 23-08-045 approval of June 2023 Financial Report and Check Register Report until audited

- » Tracy Scheel made a motion to approve Resolution 23-08-044 and Resolution 23-08-045.
- » Vice President Brandon Rohan seconded the motion.
- » President Fousse called for a vote. The motion passed with 18 aye votes.

Item 7 CRWA STAFF REPORTS

(Updates from written reports by staff, legal counsel, and others)

A. Water treatment, Storage, and Transmission operations ~ *Staff*

- o Lake Dunlap WTP:
 - Production
 - Taste and Odor
 - RFQ for Engineering Design Services
- o Hays Caldwell WTP:
 - Production
 - Pall mobile membrane filtration
 - Engineering Design Services Contract
 - PFAS test results
- o Wells Ranch WTP:
 - Production
 - Well rehabilitation and pump repairs

- B. Wells Ranch III Project ~ *Staff*
 - o Draft Water Supply and Treatment Contract
 - o Groundwater leasing and permitting
- C. South Texas Regional Water Planning Group – Region L ~ *Staff*
- D. Groundwater Districts of Guadalupe and Gonzales counties ~ *Staff*
- E. Legal and legislative matters ~ *Legal Counsel and Staff*

- » **Water Treatment, Storage, and Transmission Operations** ~ The staff did not add new information to the written report.
- » **Lake Dunlap** ~ TCEQ will be collecting water samples at Lake Dunlap in the month of August. Steve Cooper noted that the report shows the PFAS limits exceeded the standard and asked for the plan to get those back into the required limits or answer the potential repercussions. John Kaufman clarified that the sample of water taken that is being referenced is from the Hays Caldwell WTP. Mr. Kaufman stated there are no standards for those 2 parameters, there are listed PFAS parameters for which will be regulated but they are not currently being regulated, they are only for sampling and reporting at this point.
- » **Hays Caldwell WTP** ~ The staff did not add new information to the written report.
- » **Wells Ranch WTP** ~ The staff did not add new information to the written report.
- » **Wells Ranch III Project** ~ John Kaufman stated that they attended a workshop with Gonzales County. They expect next month to begin the hearing process on their application to increase production on Well 14 by 920 AF a year.
- » **South Texas Regional Water Planning Group – Region L** ~ There is no update.
- » **Groundwater Districts of Guadalupe and Gonzales Counties** ~ Refer to previous comment on meeting with Gonzales County. Mr. Kaufman stated he attended a meeting last week with Guadalupe County where he provided them with a brief status report.

Item 8 CRWA COMMITTEE REPORTS 19:08

Budget Committee: Comments and Update on Draft FY 2024 Budget ~ *Committee Chairwoman*

- » There will be a Budget Committee meeting on August 21, 2023, at 9:00 a.m.

Policy and Legislative Committee: Comments and Updates on CRWA Policies ~ *Committee Chairman*

- » Ted Gibbs stated that the personnel policy is underway and there will be a meeting on August 15, 2023, at 9:00 a.m. to discuss.

Construction Committee and Reports on Matters Related to CRWA Construction/Infrastructure Projects:

- » Project Status Comments and Updates on Committee Activity ~ *Committee Chairman*
- » **Vice President Rohan gave the report:**
 - ♦ TxDOT/CRWA IH-10 (Santa Clara & Zuehl) ~ UEG believes construction will begin next month.
 - ♦ TxDOT/CRWA FM 1518 Transmission Line Project ~ UEG is hoping for a September recommendation for a bid.
 - ♦ TxDOT/ Hays County/ Crystal Clear/ CRWA FM 621/ CR 266 Water Line Relocation Project ~ Most of the construction is complete. There are still some Crystal Clear site installations and some tie ins that have to occur.
 - ♦ GIS ~ The staff member who was working on the GIS data acquisition has been moved into a new role and UEG is working on pricing and looking at how to come up with the rest of the data acquisition.
 - ♦ Utility Engineering Group (UEG) continues to work on Standards and Specifications. They are now 3 weeks into the initial 12-week schedule.
 - ♦ CRWA staff have received the statements and qualifications for engineering services at Lake Dunlap. CRWA staff have also received a number of large firms who have responded to the

RFQ.

- ♦ The Pall unit at Hays Caldwell has been working better over the last week.
 - ♦ Ardurra reported a revised opinion of probable cost (OPC) for the Hays Caldwell project on the interior, the revised OPC came closer to 27 million dollars. Vice President Rohan said it may benefit the Hays Caldwell group to get together to reevaluate that project to see if there are things that can be eliminated to bring the cost back to a more reasonable number.
 - ♦ Ardurra was selected by the committee to do the work and is working on a scope for replacing the membranes at Hays Caldwell. The scope has not been finalized.
- » Project updates from and written reports by engineering consultants, staff, and others:
- ♦ Alliance Regional Water Authority participation ~ *Alliance*
 - ♦ Geographic Information System (GIS) ~ *Staff and UEG*
 - ♦ TxDOT/CRWA IH-10 (Santa Clara & Zuehl) Pipeline Encasement ~ *Staff and UEG*
 - ♦ TxDOT/CRWA FM 1518 Transmission Line Project ~ *Staff and UEG*
 - ♦ CRWA Standards and Specifications ~ *Staff and UEG*
 - ♦ TxDOT/Hays County/Crystal Clear/CRWA FM 621/CR 266 Water Line Relocation Project ~ *Staff*
 - ♦ CRWA Master Plan update ~ *Staff*
 - ♦ Wells Ranch III WTP Optimization and Conceptual Pipeline Designs ~ *Trihydro Engineering*
 - ♦ Hays Caldwell WTP Facility Improvements:
 - Membrane filter replacement ~ *Staff*
 - Exterior to Filter Building status report on approvals, funding, and construction ~ *Ardurra*
- » **Alliance Regional Water Authority participation** ~ Graham Moore with Alliance was not able to attend but left his update in the packet.
- » **Geographic Information System (GIS)** ~ David Kneuper of UEG did not add new information to his report.
- » **TxDOT/CRWA IH-10 (Santa Clara & Zuehl) Pipeline Encasement** ~ Mr. Kneuper did not add new information to his report.
- » **TxDOT/CRWA FM 1518 Transmission Line Project** ~ Mr. Kneuper did not add new information to his report.
- » **CRWA Standards and Specifications** ~ Mr. Kneuper added that they are finalizing the draft of standard details and he anticipates those will come to staff by August 18 for initial review.
- » **TxDOT/ Hays County/Crystal Clear/CRWA FM 621/CR 266 Water Line Relocation Project** ~ David McMullen reported they should be completing tie ins around the beginning of September.
- » **CRWA Master Plan Update** ~ Ted Gibbs asked for a status update. David Rabago stated they are planning to have it completed by the end of August. Mr. Kaufman stated that the information they asked to be included in the report was the water usage information from last year, which was the highest usage year on record.
- » **Wells Ranch III WTP Optimization and Conceptual Pipeline Designs** ~ CRWA staff did not add new information to the written report.
- » **Hays Caldwell WTP Facility Improvements:**
- ♦ Membrane filter replacement ~ Mr. Kaufman said that they met last Wednesday with members from the selection committee to review internally on a preliminary basis a scope of work that was presented to CRWA from Ardurra. No decisions were made.
 - ♦ Exterior to Filter Building status report on approvals, funding, and construction ~ James Forssell inquired about possible grants for funding the project. Byron Sanderfer stated they are looking at several different fund or grant options. Byron Sanderfer with Ardurra did not add new information to the written report.

Item 9 GENERAL BUSINESS

- A. Discussion Concerning Proposed Revisions to CRWA Bylaws
No action.

- » Mr. Gibbs spoke and stated that there was a step skipped in getting it up for approval. The step that was skipped was that the Board Secretary did not send a copy, in written form, of the document to all Board members. It was sent out 30 days prior to the Board members, however, it was in an email and that does not qualify for a written response. Mr. Gibbs provided background for the review of the Bylaws. Mr. Gibbs said the plan is for the CRWA secretary to send notice to all the Board of Trustees with a copy of the document, given more than 7 days' notice to allow everyone to review it, request any changes, at the next meeting it will be on the agenda for a review and vote.
- » Tracy Scheel asked about changes regarding the evaluation of the General Manager.
- » Mr. Gibbs stated the process for evaluating the General Manager will be taken out of the Bylaws and placed in the Personnel Policy.
- » Martin Poore asked why an email that was sent out with a copy of the Bylaws was not accepted as a written copy; it was stated that it was because it was sent by a CRWA staff member and not the CRWA secretary.
- » Doris Steubing asked for a review of the Treasurers duties.
- B. CRWA 23-08-046 Concerning CRWA Contribution to Employee Spouse and Dependent Health Insurance Costs
 Adopt Resolution 23-08-046 approval of CRWA contribution of 50% towards the cost of employee spouse and dependent health insurance costs in FY 2024.
 - » Joan Wilkinson spoke about the current employee health insurance and the rate increase for current plans by 49%. For an employee that ensures their family, it will increase to over \$2,000 a month. Currently, CRWA does not pay for dependent cost. Based upon the current budget, it would cost CRWA in the upcoming FY 2024 budget \$127,000. This number is estimated to be for 11 employees, currently there are only 6-7 employees that have dependent coverage.
 - » Mr. Poore made a motion to approve Resolution 23-08-046.
 - » Randy Schwenn seconded the motion.
 - » Mrs. Sheel asked if the competitors offer anything similar to their employees. It was spoken that other companies do provide support for dependent cost.
 - » President Fousse called for a vote. The motion passed with 18 aye votes.
- C. CRWA 23-08-047 Concerning Engineering Design Services for the County Line SUD Transmission Line
 Adopt Resolution 23-08-047 approval of an Engineering Service Order with Gallegos Engineering, Inc. for alignment determination and related services concerning a proposed transmission line to the County Line SUD Point of Delivery at a cost not to exceed \$25,000.00.
 - » Vice President Rohan stated the Construction Committee decided not to make a recommendation to the full Board because they did not have a funding mechanism for it. Mr. Rohan asked how County Line would like to proceed with this item.
 - » Mrs. Sheel stated they would like to proceed.
 - » Vice President Rohan stated this is not the full scope. This is looking at the alignment for now. Staff still need to have a discussion with the Hays Caldwell group on how this gets funded and who pays for it.
 - » Mrs. Scheel made a motion to approve Resolution 23-08-047.
 - » Donald Bosworth seconded the motion.
 - » President Fousse called for a vote. There were 17 ayes and 1 nay. The motion passed.
- D. CRWA 23-08-048 Concerning Design Services for the HCWTP Nanofiltration Improvement Project
 Adopt Resolution 23-08-048 approval of an Engineering Service Order with Ardurra for initial design services pertaining to the Hays Caldwell WTP Nanofiltration Improvement Project at a cost not to exceed \$25,000.
 - » Vice President Rohan stated the Construction Committee did not move forward with this item since it was not complete. Vice President Rohan asked that the entities that are participating in this let the Board know their thoughts and how they would like to move forward.
 - » Mr. Poore made a motion to approve Resolution 23-08-048.
 - » James Forsell seconded the motion.
 - » President Fousse clarified that expensed funds will be reimbursed to CRWA through a

reimbursement resolution.

- » Tracy Sheel deferred her comments to her General Manager, Mr. Ramos.
 - » Mr. Ramos stated, "I have heard words about urgency and heard words of importance, but the reality is that there really is no urgency at this time. I do not see how taking action today is going to cause failure or any more delay than what has occurred right now. We currently have a Pall membrane filter that has been in operation for six months and has not produced the water that we have needed thus far. All I asked is for inclusion. I appreciate that Lavernia made the motion for this topic, but again, I think what is at hand is the Hays Caldwell entities with regards to what is happening here. Not to forget the fact that the City of San Marcos is a part of this project, and they were not even consulted on this. You heard the General Manager state it is the beginning of a task order for a project that is going to be between 10-12 million dollars. I think if we have time, we sit and talk about the scope and provide comments to the scope. I am not sure if Martindale was a part of the meeting. My understanding the only ones a part of that meeting were Maxwell. The General Manager at Maxwell concluded and sent an email to Mr. Kaufman that he advises this item be tabled, but Mr. Kaufman did not inform you of that. Tabling is not going to cause any more of a hurt or delay. It is what it is right now. We are paying for a Pall membrane that is \$480,000 a year and it is not working the way we said it was going to work. All I ask for is some time for the entities, myself (County Line) included and Maxwell, to look and see if there are any corrections or additions, we can make in regard to this. I had corrections and additions which I was never given the opportunity too. You are asking for County Line to pay 29.275%, which is anywhere from 2-3 million dollars at the end. I think we should have a say. I do not see any hurt with putting this off for another meeting. Again, there is not urgency. I would take that back as far as urgency, these filters have been failing. We have a system in place, the Pall filters, that should be working. The failure is that the Pall system is not working. Instead of us moving forward without inclusion of our position and our point which I feel is valuable here for this effort. We want a say at the table. We want to say how the money is spent. We want a say on how it derives and moves forward because we are taking a large chunk. We and the City of San Marcos are making a large chunk of this, 29.7% they have and we have 29.2%. Again, I don't see the urgency and another meeting will not hurt anybody. I ask and have asked many times, that when we start projects, all the entities be involved to make these discussions so we can move together. Ultimately, you are going to come to us and ask us for bonds. We are having heartache right now. We move forward together or we don't move forward at all. All I am saying right now is that we are not ready to move forward and a delay in one month is not going to cause heartbreak, it is not going to cause the system to fail, and it is not going to cause any more than what is happening right now. We should be concentrating our efforts on the Pall system why is not working and we paid for a product that is not delivering what it said it was supposed to deliver. That is my concern."
 - » President Fousse stated that it is apparent that the users of this system are not in agreement. The users need to get together and decide what they want to do.
 - » Mabel Vaughn asked to clarify if the Pall membrane was not working. Mr. Kaufman stated that Mr. Ramos' previous statement about the Pall membrane not working was a false statement.
 - » Mr. McMullen commented on the Pall membrane trailer's productivity. He stated that there have been no issues with the trailer for the past few weeks. The water quality determines how much water the trailer will produce. The quality of the water coming down the river right now is terrible; this is affecting the production of the trailer. To meet productions, they cannot run one of the old Koch filters and the Pall trailer. They are producing more than the plant was designed for, so they must run 2 of the Koch filters. In doing so, if the Koch filters are turned down too much they do not work. They have turned them up a little more to even them out. The Pall unit is running first but supplementing the Koch system with the Pall unit.
 - » President Fousse called for a vote. There were 14 nays and 4 ayes. The motion failed.
- E. CRWA 23-08-049 Concerning Grant Application Services
Adopt Resolution 23-08-049 approval of an Engineering Service Order with Ardurra Group, Inc. to provide grant application services in support of the HCWTP Improvements Project at a cost not to exceed \$46,186.00.
- » Mrs. Vaughn made a motion to approve Resolution 23-08-049.

- » Mr. Fonville seconded the motion.
- » President Fousse called for a vote. The motion passed with 18 ayes.

Item 10 EXECUTIVE SESSION

The Board of Trustees will meet in a closed session to discuss the following items pursuant to Chapter 551 of the Texas Government Code, including, where appropriate, Sections 551.071, 551.072, 551.074, 551.076, 551.086, 551.089, and 418.183(f) of the Texas Government Code.

- A. Meet and consult with Attorney in private as permitted by Section 551.071(1) of the Texas Government Code to seek advice upon and discuss the status of contemplated litigation, claims, and controversies related to:
 - o Status of claim asserted against Trihydro Corporation related to engineering design services for the Wells Ranch Phase 2 Generator Installation Project;
 - o Notice from Shannon Monk, Inc. concerning allegation of wrongful retention of retainage allegedly due to Loftin Equipment Co. under Procurement Contract for Wells Ranch Phase 2 Generator Installation Project; and
 - o Shannon Monk, Inc. pay applications 12 and 13 submitted in connection with the Construction Contract for Wells Ranch Phase 2 Generator Installation Project.
- B. Meet in private as permitted by Section 551.074 of the Texas Government Code to deliberate the employment, duties, and process for evaluating the General Manager, and a succession plan for the General Manager position.
 - » The Board of Trustees entered Executive Session at approximately 7:35 p.m. to discuss agenda item 10A.

Item 11 RETURN TO OPEN MEETING

The Board may consider, deliberate, and take action on the items discussed in the Executive Session.

- » The Board of Trustees returned from Executive Session at approximately 9:12 p.m.
- » Mr. Poore made a motion in reference to Item 10A to require Trihydro to come to the table and agree to mediation by August 24, 2023, and that subsequently they begin mediation proceedings by October 15, 2023. If there is a failure to meet those dates, then they differ to council on moving forward with an actual lawsuit.
- » Mr. Gibbs seconded the motion.
- » President Fousse called for a vote. The motion passed with 18 aye votes.
- » Vice President Rohan made a motion on item 10A to release the sum of pay releases 12 and 13 with holding back the \$19,832.40 of miscellaneous items that staff needs to confer with Shannon Monk on her documentation and with an additional change order for any credits for deducts.
- » This motion was seconded by Ted Gibbs.
- » President Fousse called for a vote. The motion passed with 18 ayes.
- » Tracy Sheel made a motion in reference to item 10B. The motion is to direct the General Manager to seek funding in the 2024 budget for an Assistant General Manager position.
- » Mr. Gibbs seconded the motion.
- » President Fousse called for a vote. The motion passed with 18 ayes.

Item 12 FUTURE BOARD MEMBER AGENDA ITEMS

- » Look into changing the auditors.

Item 13 Adjourn the meeting

- » Martin Poore made a motion to adjourn the meeting.
- » Christina Miller seconded the motion.
- » President Fousse adjourned the meeting at approximately 9:16 p.m.

NOTICE: The Board of Trustees may meet in a closed session to discuss any item listed above pursuant to Chapter 551 of the Texas Government Code, including, where appropriate, sections 551.071, 551.072, 551.074, 551.076, 551.086, 551.089, and 418.183(f) of the Texas Government Code. All deliberations and formal action will occur in open session.

**CANYON REGIONAL WATER AUTHORITY
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
09/11/2023	FINANCIAL REPORT AND CHECK REGISTER REPORT	CRWA 23-09-051

INITIATED BY

JOAN WILKINSON

STAFF RECOMMENDATION

Approve the July 2023 Financial Report and Check Register Report until audited.

BACKGROUND INFORMATION

The July 2023 Financial Report and Check Register Report are attached.

FINANCIAL IMPACT

None

MOTION

Motion to approve the following resolution.

AT
for GM

CANYON REGIONAL WATER AUTHORITY

RESOLUTION No. 23-09-051

BE IT RESOLVED that the July 2023 Financial Report and Check Register Report of Canyon Regional Water Authority are approved until audited.

Adopted this 11th day of September 2023

Ayes ____ Nays ____ Abstained ____ Absent ____

Approved by: _____

Timothy D. Fousse, CPM
President

Certified and attested by: _____

Doris Steubing
Secretary

CANYON REGIONAL WATER AUTHORITY

Balance Sheet

As of July 31, 2023

	Jul 31, 23
ASSETS	
Current Assets	
Checking/Savings	
1001 · First United Bank	
1006 · First United Checking #5207	1,026,177.43
1010 · First United Special #7162	2,104.79
1015 · Money Market #2160	1,108,187.03
1017 · HC SM Capacity Buy-In #6744	1,145,838.20
Total 1001 · First United Bank	3,282,307.45
1100 · First United Bank (Res)	
1105 · LD/MC Series 2016, #3017	1,045,738.01
1107 · HC 2005 #3603	2,228.83
1111 · HC Series 2017 #6074	63,496.40
1109 · HC Series 2021 #6663	164,771.48
1113 · HC Counties 2021 Ref #0636	42,686.13
1132 · Wells Ranch Series 2015, #6031	980,157.21
1133 · Wells Ranch Series 2016, #3009	790,536.43
1134 · Wells Ranch Series 2021 #0911	295,124.80
1140 · L/D Membrane Fund #5701	1,139,397.50
1140-01 · LD Membr-Nanostone Escrow #2545	192,955.30
1142 · H/C Membrane Fund #5693	413,098.39
1145 · Repair & Replacement Fund	4,032,338.35
Total 1100 · First United Bank (Res)	9,162,528.83
1120 · Logic	
1121 · Logic, General Funds	1,189,184.23
1127 · Wells Ranch, Construction #027	366,645.99
1158 · HC Construction	16,933,263.63
Total 1120 · Logic	18,489,093.85
1160 · BOKF, NA, Austin,WR Series 2015	124,420.65
1161 · BOKF, NA,Austin, HC Series 2017	4,107,805.57
Total Checking/Savings	35,166,156.35
Accounts Receivable	
1200 · Accounts Receivable	3,182,958.00
1205 · A/R, Alliance Water	
1205-01 · A/R, Alliance,Crystal Clear SUD	1,821,238.07
1205-02 · A/R, Alliance, Martindale WSC	30,838.05
1205-03 · A/R, Alliance, Green Valley SUD	1,134,207.53
1205-04 · A/R, Alliance, County Line SUD	189,827.00
Total 1205 · A/R, Alliance Water	3,176,110.65
Total Accounts Receivable	6,359,068.65
Other Current Assets	
1499 · Undeposited Funds	23,796.68
Total Other Current Assets	23,796.68
Total Current Assets	41,549,021.68

CANYON REGIONAL WATER AUTHORITY
Balance Sheet
As of July 31, 2023

	Jul 31, 23
Fixed Assets	
1400 · Capital Assets	
1404 · Administration Building	586,288.00
1406 · Capitalized Construction Intere	11,273,728.00
1410 · Equipment & Vehicles	402,287.46
1411 · Nanostone - Lake Dunlap	1,156,411.20
1416 · Hays Caldwell	6,437,579.37
1420 · Lake Dunlap Phase I	4,764,833.00
1422 · Mid-Cities Phase I	8,475,370.50
1424 · Office Equipment	77,863.66
1434 · Property Improvements	60,021.00
1436 · River Crossing	577,934.36
1441 · LD Ozone Project	3,677,549.16
1442 · Dunlap Water Treatment Plant	5,155,886.29
1443 · Dunlap Chemical Tanks	30,326.57
1444 · Hays Caldwell Phase 2	2,053,300.19
1445 · HC Chemical Tanks	5,293.13
1446 · Mid-Cities Phase 2	32,322,395.02
1447 · Hays Caldwell Expansion-2017	
1447-01 · HC Expansion, Capitalized Int	122,276.51
1447 · Hays Caldwell Expansion-2017 - Other	1,780,625.02
Total 1447 · Hays Caldwell Expansion-2017	1,902,901.53
1450 · Wells Ranch Project	
1450-01 · WellsRanch, Cap Interest	5,041,728.49
1450 · Wells Ranch Project - Other	40,885,863.75
Total 1450 · Wells Ranch Project	45,927,592.24
1451 · Wells Ranch Phase II-2011	
1451-01 · Capitalized Interest	1,872,118.97
1451 · Wells Ranch Phase II-2011 - Other	14,113,408.01
Total 1451 · Wells Ranch Phase II-2011	15,985,526.98
1452 · Wells Ranch Phase II-2015	
1452-01 · Capitalized Interest	1,930,053.69
1452 · Wells Ranch Phase II-2015 - Other	39,920,319.22
Total 1452 · Wells Ranch Phase II-2015	41,850,372.91
1453 · Wells Ranch Phase III	472,832.35
1490 · Accumulated Depreciation	-47,704,967.12
Total 1400 · Capital Assets	135,491,325.80
Total Fixed Assets	135,491,325.80
Other Assets	
1805 · Deferred Outflow-Pension	174,748.66
1670 · Land	
1672 · Johnson Abstract #47	163,243.95
1673 · Hays Caldwell Project	
1673-01 · Carlisle - 2.009 Acres	549,930.44
1673-02 · Land Acquisition Consultant HC	5,698.00
Total 1673 · Hays Caldwell Project	555,628.44
1674 · Randolph Foster 10 Acres	290,837.56
1675 · Wells Ranch Project	62,061.82
1676 · Land & Land Rights	1,276,634.70
Total 1670 · Land	2,348,406.47

CANYON REGIONAL WATER AUTHORITY

Balance Sheet

As of July 31, 2023

	Jul 31, 23
1703 · Water Rights	3,439,604.49
1800 · Deferred Loss on Debt Refunding	132,163.00
Total Other Assets	6,094,922.62
TOTAL ASSETS	183,135,270.10
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
2000 · Accounts Payable	770,179.37
Total Accounts Payable	770,179.37
Credit Cards	
2003 · A/P, Credit Cards	32.57
Total Credit Cards	32.57
Other Current Liabilities	
2310 · Deferred Inflow-Pension	26,892.00
2300 · Net Pension Liability	109,403.00
2002 · A/P, Misc.	-240.00
2140 · Texas Workforce	3.97
2165 · TCDRS Retirement Payable	28,931.17
Total Other Current Liabilities	164,990.14
Total Current Liabilities	935,202.08
Long Term Liabilities	4,975,022.00
2200 · Deferred Revenue - San Marcos	
2400 · Bonds Payable	
2408 · LD/MC Tax-Exempt Series 2016	16,720,000.00
2426 · Hays Caldwell Series 2005	535,000.00
2430 · Hays Caldwell Series 2017	4,055,000.00
2431 · Hays Caldwell TE Series 2021	11,650,000.00
2432 · Hays Caldwell Series 2021 Ref	1,940,000.00
2443 · Wells Ranch Series 2015	33,195,000.00
2446 · Wells Ranch Series 2016	21,385,000.00
2447 · Wells Ranch Series 2021	12,600,000.00
Total 2400 · Bonds Payable	102,080,000.00
2490 · Unamortized Premiums	6,223,387.00
Total Long Term Liabilities	113,278,409.00
Total Liabilities	114,213,611.08
Equity	
3810 · Restricted for Membranes	1,622,825.00
3820 · Restricted for Debt Service	4,181,580.00
3950 · Retained Earnings	10,146,761.77
3975 · Inv in Cap Asset, net of debt	42,875,888.52
Net Income	10,094,603.73
Total Equity	68,921,659.02
TOTAL LIABILITIES & EQUITY	183,135,270.10

Canyon Regional Water Authority
Profit Loss Budget vs. Actual
October 2022 - July 2023

	July 2023	October 2022 July 2023	Annual Budget	\$ Over/(Under) Annual Budget	% of Annual Budget
Income					
4000 · Revenues					
4002 · Debt Payments	1,073,788.31	10,737,814.40	12,766,256.11	-2,028,441.71	84.11%
4003 · Raw Water	542,043.20	5,420,217.02	6,588,316.09	-1,168,099.07	82.27%
4004 · Water-New Berlin	28,126.00	31,549.00	57,023.93	-25,474.93	55.33%
4009 · Membrane Replacement Fund	45,153.81	451,538.10	541,867.57	-90,329.47	83.33%
4010 · Line Use & Delivery Contracts	11,902.44	119,024.40	142,835.08	-23,810.68	83.33%
4011 · Line Use New Berlin	1,429.94	14,299.40	17,160.00	-2,860.60	83.33%
4012 · Raw Water Delivery Fees	32,555.42	290,454.60	531,234.89	-240,780.29	54.66%
4017 · Water Sales	393,157.47	4,168,102.93	5,098,170.49	-930,067.56	81.76%
4018 · Plant Operations	295,297.68	2,952,976.80	3,543,714.12	-590,737.32	83.33%
4020 · Repair & Replacement Funds	145,160.85	1,451,608.50	1,742,000.00	-290,391.50	83.33%
4022 · CRWA Administrative	154,108.26	1,541,082.60	1,854,409.67	-313,327.07	83.1%
4023 · Alliance Water	415,676.17	4,156,761.70	4,988,323.01	-831,561.31	83.33%
4024 · Interest Income General	33,663.09	300,095.10	0.00	300,095.10	100.0%
4026 · Interest Income Bond Accounts	40,676.67	275,160.94	0.00	275,160.94	100.0%
4028 · Interest Construction Accounts	93,475.28	780,750.21	0.00	780,750.21	100.0%
4030 · Other Income	1,240.13	12,884.82	0.00	12,884.82	100.0%
Total 4000 · Revenues	3,307,444.72	32,704,320.52	37,871,310.96	-5,166,990.44	86.36%
Expense					
5000 · Bond Repayments					
5005 · Bond Payments	1,054,602.37	10,540,890.95	12,766,256.11	-2,225,365.16	82.57%
Total 5000 · Bond Repayments	1,054,602.37	10,540,890.95	12,766,256.11	-2,225,365.16	82.57%
5500 · Water Purchases					
5501 · Raw Water Purchases	1,833,936.56	5,234,575.54	6,588,316.09	-1,353,740.55	79.45%
5502 · Water Purchases, New Berlin	28,126.00	31,549.00	57,023.93	-25,474.93	55.33%
Total 5500 · Water Purchases	1,862,062.56	5,266,124.54	6,645,340.02	-1,379,215.48	79.25%
5600 · Membrane Funds	40,284.00	243,979.00	541,867.57	-297,888.57	45.03%
5700 · Repair & Replacement Funds	0.00	436,136.09	1,742,000.00	-1,305,863.91	25.04%
6000 · Line Use & Delivery Costs					
6005 · Line Use Contract Maxwell	0.00	0.00	3,988.00	-3,988.00	0.0%
6008 · Line Use Contract New Berlin	0.00	0.00	17,160.00	-17,160.00	0.0%
6010 · Line Contract GBRA	11,570.59	115,705.90	138,847.08	-23,141.18	83.33%
6011 · GBRA Raw Water Delivery Fees	34,085.17	290,390.36	531,234.89	-240,844.53	54.66%
Total 6000 · Line Use & Delivery Costs	45,655.76	406,096.26	691,229.97	-285,133.71	58.75%

Canyon Regional Water Authority
Profit Loss Budget vs. Actual
October 2022 - July 2023

	July 2023	October 2022 July 2023	Annual Budget	\$ Over/(Under) Annual Budget	% of Annual Budget
7000 • Plant Expenses-Variable Costs					
7005 • Plant Utilities	197,406.41	2,327,912.80	2,937,210.46	-609,297.66	79.26%
7010 • Chemicals	234,956.92	2,116,700.68	2,167,460.03	-50,759.35	97.66%
Total 7000 • Plant Expenses-Variable Costs	432,363.33	4,444,613.48	5,104,670.49	-660,057.01	87.07%
7100 • Operating Expenses					
7115 • Plant Maintenance & Supplies	114,440.92	844,232.25	1,250,000.00	-405,767.75	67.54%
7116 • Generator Maintenance	0.00	44,684.92	124,850.00	-80,165.08	35.79%
7117 • Equipment rental	3,713.94	33,821.02	33,300.00	521.02	101.57%
7120 • SCADA	0.00	67,470.97	205,000.00	-137,529.03	32.91%
7122 • Vehicle Operations	2,840.48	33,655.97	90,000.00	-56,344.03	37.4%
7125 • Grounds Maintenance	10,044.99	100,506.74	118,630.00	-18,123.26	84.72%
7131 • Permits and Fees	0.00	27,040.12	20,550.00	6,490.12	131.58%
7135 • Lab Supplies & Testing Fees	10,730.57	90,272.34	125,700.00	-35,427.66	71.82%
7140 • Insurance	0.00	99,459.38	103,964.46	-4,505.08	95.67%
7150 • Meals & Functions	1,867.36	30,447.18	35,000.00	-4,552.82	86.99%
7155 • Memberships & Dues	210.00	9,467.00	6,550.00	2,917.00	144.53%
7160 • Mileage	3,879.23	32,502.47	31,250.00	1,252.47	104.01%
7162 • Office Supplies and Expense	4,102.39	22,749.28	27,000.00	-4,250.72	84.26%
7165 • Training	0.00	2,455.19	11,500.00	-9,041.81	21.38%
7170 • Clothing	0.00	3,300.00	4,200.00	-900.00	78.57%
7175 • Telephones	365.24	3,658.30	4,500.00	-841.70	81.3%
7180 • Mobile Telephones	1,293.15	12,098.20	14,900.00	-2,801.80	81.2%
7190 • Network Expenses	0.00	5,632.85	7,000.00	-1,367.15	80.47%
7191 • Internet Domain	410.49	3,769.75	4,000.00	-230.25	94.24%
7195 • Contract Labor	0.00	0.00	4,000.00	-4,000.00	0.0%
7196 • GW Transport/Pumping Fees	15,288.55	247,852.11	280,000.00	-32,147.89	88.52%
Total 7100 • Operating Expenses	169,187.31	1,715,079.04	2,501,894.46	-786,815.42	68.55%
7500 • Payroll Expenses					
7505 • Annual Pay	132,780.78	1,198,536.42	1,570,212.20	-371,675.78	76.33%
7510 • Overtime	9,497.42	72,195.85	111,735.39	-39,539.54	64.61%
7530 • On Call	240.00	1,972.57	10,920.00	-8,947.43	18.06%
Total 7500 • Payroll Expenses	142,518.20	1,272,704.84	1,692,867.59	-420,162.75	75.18%
7600 • Employee Benefits					
7605 • Payroll Taxes	10,430.04	92,385.52	131,160.35	-38,774.83	70.44%
7610 • Insurance	13,593.84	134,802.09	192,000.00	-57,197.91	70.21%
7615 • Retirement	18,954.88	162,683.92	225,151.39	-62,467.47	72.26%
Total 7600 • Employee Benefits	42,978.76	389,871.53	548,311.74	-158,440.21	71.1%

Canyon Regional Water Authority
Profit Loss Budget vs. Actual
October 2022 - July 2023

	July 2023	October 2022 July 2023	Annual Budget	\$ Over/(Under) Annual Budget	% of Annual Budget
7800 • Professional Fees					
7801 • SEC Disclosure	0.00	0.00	2,250.00	-2,250.00	0.0%
7802 • Bank Service Fees	54.00	193.00	200.00	-7.00	96.5%
7803 • 401(k) Plan Fees	400.00	1,707.50	2,000.00	-292.50	85.38%
7806 • Bond Fees	800.00	2,800.00	3,000.00	-200.00	93.33%
7805 • Legal Fees	14,908.35	302,572.42	275,000.00	27,572.42	110.03%
7810 • Engineering	28,751.16	187,878.21	350,000.00	-162,121.79	53.66%
7815 • Director Bonds	0.00	0.00	1,200.00	-1,200.00	0.0%
7820 • Accounting & Audit	0.00	14,825.00	14,900.00	-75.00	99.5%
Total 7800 • Professional Fees	44,913.51	509,976.13	648,550.00	-138,573.87	78.63%
7823 • Alliance Water	1,247,081.00	4,846,744.83	4,988,323.01	-141,578.18	97.16%
Total Expense	5,051,646.80	30,072,216.69	37,871,310.96	-7,799,094.27	79.41%
Net Ordinary Income	-1,774,202.08	2,632,103.83	0.00	2,632,103.83	100.0%
Other Income/Expense					
Other Income					
8000 • Bond Payment Principal	746,249.99	7,462,499.90	0.00	0.00	100.0%
Net Other Income/Expense	746,249.99	7,462,499.90	0.00	7,462,499.90	100.0%
Net Income	-1,027,952.09	10,094,603.73	0.00	10,094,603.73	100.0%

CANYON REGIONAL WATER AUTHORITY
Profit & Loss Prev Year Comparison
October 2022 through July 2023

	Oct '22 - Jul 23	Oct '21 - Jul 22	\$ Change	% Change
Ordinary Income/Expense				
Income				
4000 - Revenues				10.4%
4002 - Debt Payments	10,737,814.40	9,722,622.71	1,015,191.69	41.7%
4003 - Raw Water	5,420,217.02	3,823,921.70	1,596,295.32	653.5%
4004 - Water-New Berlin	31,549.00	4,187.20	27,361.80	454.2%
4009 - Membrane Replacement Fund	451,538.10	81,478.80	370,059.30	-67.2%
4010 - Line Use & Delivery Contracts	119,024.40	362,789.70	-243,765.30	0.0%
4011 - Line Use New Berlin	14,299.40	14,299.40	0.00	100.0%
4012 - Raw Water Delivery Fees	290,454.60	0.00	290,454.60	20.6%
4017 - Water Sales	4,168,102.93	3,456,857.31	711,245.62	21.3%
4018 - Plant Operations	2,952,976.80	2,434,085.40	518,891.40	74.2%
4020 - Repair & Replacement Funds	1,451,608.50	833,299.90	618,308.60	27.7%
4022 - CRWA Administrative	1,541,082.60	1,206,885.10	334,197.50	9.1%
4023 - Alliance Water	4,156,761.70	3,809,436.40	347,325.30	607.6%
4024 - Interest Income General	300,095.10	42,408.04	257,687.06	618.7%
4026 - Interest Income Bond Accounts	275,160.94	38,284.11	236,876.83	933.4%
4028 - Interest Construction Accounts	780,750.21	75,550.58	705,199.63	-14.1%
4030 - Other Income	12,884.82	14,990.38	-2,105.56	
Total 4000 - Revenues	32,704,320.52	25,921,096.73	6,783,223.79	26.2%
Total Income	32,704,320.52	25,921,096.73	6,783,223.79	26.2%
Gross Profit	32,704,320.52	25,921,096.73	6,783,223.79	26.2%
Expense				
5000 - Bond Repayments				2.2%
5005 - Bond Payments	10,540,890.95	10,311,585.15	229,305.80	
Total 5000 - Bond Repayments	10,540,890.95	10,311,585.15	229,305.80	2.2%
5500 - Water Purchases				20.6%
5501 - Raw Water Purchases	5,234,575.54	4,341,739.52	892,836.02	653.5%
5502 - Water Purchases, New Berlin	31,549.00	4,187.20	27,361.80	
Total 5500 - Water Purchases	5,266,124.54	4,345,926.72	920,197.82	21.2%
5600 - Membrane Funds	243,979.00	1,294.47	242,684.53	18,747.8%
5700 - Repair & Replacement Funds	436,136.09	74,633.34	361,502.75	484.4%
6000 - Line Use & Delivery Costs				-67.3%
6010 - Line Contract GBRA	115,705.90	354,287.98	-238,582.08	100.0%
6011 - GBRA Raw Water Delivery Fees	290,390.36	0.00	290,390.36	
Total 6000 - Line Use & Delivery Costs	406,096.26	354,287.98	51,808.28	14.6%
7000 - Plant Expenses-Variable Costs				17.8%
7005 - Plant Utilities	2,327,912.80	1,976,535.75	351,377.05	34.3%
7010 - Chemicals	2,116,700.68	1,576,540.62	540,160.06	
Total 7000 - Plant Expenses-Variable Costs	4,444,613.48	3,553,076.37	891,537.11	25.1%
7100 - Operating Expenses				15.2%
7115 - Plant Maintenance & Supplies	844,232.25	733,128.24	111,104.01	-24.0%
7116 - Generator Maintenance	44,684.92	58,825.16	-14,140.24	23.7%
7117 - Equipment rental	33,821.02	27,343.80	6,477.22	-64.9%
7120 - SCADA	67,470.97	192,460.95	-124,989.98	35.0%
7122 - Vehicle Operations	33,655.97	24,936.76	8,719.21	22.2%
7125 - Grounds Maintenance	100,506.74	82,231.76	18,274.98	17.5%
7131 - Permits and Fees	27,040.12	23,005.23	4,034.89	-2.9%
7135 - Lab Supplies & Testing Fees	90,272.34	92,951.02	-2,678.68	18.2%
7140 - Insurance	99,459.38	84,138.18	15,321.20	13.1%
7150 - Meals & Functions	30,447.18	26,930.28	3,516.90	99.9%
7155 - Memberships & Dues	9,467.00	4,737.00	4,730.00	40.4%
7160 - Mileage	32,502.47	23,146.80	9,355.67	17.3%
7162 - Office Supplies and Expense	22,749.28	19,398.51	3,350.77	-73.8%
7165 - Training	2,458.19	9,393.89	-6,935.70	10.0%
7170 - Clothing	3,300.00	3,000.00	300.00	-12.2%
7175 - Telephones	3,658.30	4,167.94	-509.64	-8.4%
7180 - Mobile Telephones	12,098.20	13,211.53	-1,113.33	-34.1%
7190 - Network Expenses	5,632.85	8,545.41	-2,912.56	-8.6%
7191 - Internet Domain	3,769.75	4,122.85	-353.10	21.0%
7196 - GW Transport/Pumping Fees	247,852.11	204,851.21	43,000.90	
Total 7100 - Operating Expenses	1,715,079.04	1,640,526.52	74,552.52	4.5%
7500 - Payroll Expenses				18.4%
7505 - Annual Pay	1,198,536.42	1,012,117.70	186,418.72	-8.5%
7510 - Overtime	72,195.85	78,940.84	-6,744.99	-77.8%
7530 - On Call	1,972.57	8,880.00	-6,907.43	
Total 7500 - Payroll Expenses	1,272,704.84	1,099,938.54	172,766.30	15.7%
7600 - Employee Benefits				15.5%
7605 - Payroll Taxes	92,385.52	80,021.67	12,363.85	21.5%
7610 - Insurance	134,802.09	110,985.76	23,816.33	39.4%
7615 - Retirement	162,683.92	116,669.35	46,014.57	
Total 7600 - Employee Benefits	389,871.53	307,676.78	82,194.75	26.7%

CANYON REGIONAL WATER AUTHORITY
Profit & Loss Prev Year Comparison
October 2022 through July 2023

	Oct '22 - Jul 23	Oct '21 - Jul 22	\$ Change	% Change
7800 • Professional Fees				
7801 • SEC Disclosure	0.00	2,250.00	-2,250.00	-100.0%
7802 • Bank Service Fees	193.00	151.00	42.00	27.8%
7803 • 401(k) Plan Fees	1,707.50	1,527.50	180.00	11.8%
7806 • Bond Fees	2,800.00	2,800.00	0.00	0.0%
7805 • Legal Fees	302,572.42	123,775.96	178,796.46	144.5%
7810 • Engineering	187,878.21	233,025.71	-45,147.50	-19.4%
7820 • Accounting & Audit	14,825.00	14,400.00	425.00	3.0%
Total 7800 • Professional Fees	509,976.13	377,930.17	132,045.96	34.9%
7823 • Alliance Water	4,846,744.83	4,371,000.55	475,744.28	10.9%
Total Expense	30,072,216.69	26,437,876.59	3,634,340.10	13.8%
Net Ordinary Income	2,632,103.83	-516,779.86	3,148,883.69	609.3%
Other Income/Expense				
Other Income				
8000 • Bond Payment Principal	7,462,499.90	6,962,499.93	499,999.97	7.2%
Total Other Income	7,462,499.90	6,962,499.93	499,999.97	7.2%
Net Other Income	7,462,499.90	6,962,499.93	499,999.97	7.2%
Net Income	10,094,603.73	6,445,720.07	3,648,883.66	56.6%

CANYON REGIONAL WATER AUTHORITY

Monthly General Account Check Register

As of July 31, 2023

Type	Date	Num	Name	Memo	Amount	Balance
1001 - First United Bank						3,127,067.73
1006 - First United Checking #5207						3,127,067.73
Bill Pmt - Check	07/03/2023	ACH	GVEC - Big Oaks	05/08/2023-06/08/2023	-28.00	3,127,039.73
Bill Pmt - Check	07/03/2023	ACH	GVEC - Bond East Well	05/08/2023-06/08/2023	-561.10	3,126,478.63
Bill Pmt - Check	07/03/2023	ACH	GVEC - Bond West Well	05/08/2023-06/08/2023	-3,144.50	3,123,334.13
Bill Pmt - Check	07/03/2023	ACH	GVEC - Bull Trap Well	05/08/2023-06/08/2023	-1,742.00	3,121,592.13
Bill Pmt - Check	07/03/2023	ACH	GVEC - Camphouse Well	05/08/2023-06/08/2023	-2,561.00	3,119,031.13
Bill Pmt - Check	07/03/2023	ACH	GVEC - Chicken House Well	05/08/2023-06/08/2023	-2,198.86	3,116,832.27
Bill Pmt - Check	07/03/2023	ACH	GVEC - Christian East Well	05/08/2023-06/08/2023	-2,493.60	3,114,338.67
Bill Pmt - Check	07/03/2023	ACH	GVEC - Christian West Well	05/08/2023-06/08/2023	-3,105.23	3,111,233.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Cibolo	05/08/2023-06/08/2023	-28.00	3,111,205.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Coastal Field Well	05/08/2023-06/08/2023	-2,010.00	3,109,195.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Damerau	05/08/2023-06/08/2023	-53.00	3,109,142.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Deadman Tank Well	05/08/2023-06/08/2023	-9,533.00	3,099,609.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Deer Stand Well	05/08/2023-06/08/2023	-9,487.00	3,090,122.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - FM 467	05/08/2023-06/08/2023	-30.00	3,090,092.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Green Valley	05/08/2023-06/08/2023	-30.00	3,090,062.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - GV 7293 IH 10	05/08/2023-06/08/2023	-30.00	3,090,032.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Hardy Road	05/08/2023-06/08/2023	-35.00	3,089,997.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Hickory Forest	05/08/2023-06/08/2023	-52.00	3,089,945.44
Bill Pmt - Check	07/03/2023	ACH	GVEC - Littlefield Well	05/08/2023-06/08/2023	-2,454.03	3,087,491.41
Bill Pmt - Check	07/03/2023	ACH	GVEC - Marion	05/08/2023-06/08/2023	-27.00	3,087,464.41
Bill Pmt - Check	07/03/2023	ACH	GVEC - Pig Trap Well	05/08/2023-06/08/2023	-1,602.00	3,085,862.41
Bill Pmt - Check	07/03/2023	ACH	GVEC - Pivot Irrigation	05/08/2023-06/08/2023	-62.00	3,085,800.41
Bill Pmt - Check	07/03/2023	ACH	GVEC - Tommys Well	05/08/2023-06/08/2023	-205.00	3,085,595.41
Bill Pmt - Check	07/03/2023	ACH	GVEC - Wagner Booster Stn #2	05/08/2023-06/08/2023	-787.02	3,084,808.39
Bill Pmt - Check	07/07/2023	36925	5S Service Company LLC	Repairs	-1,534.70	3,083,273.69
Bill Pmt - Check	07/07/2023	36926	Analytical Environmental Labor...	Lab Testing	-270.00	3,083,003.69
Bill Pmt - Check	07/07/2023	36927	Archive Power Systems, Inc.	DocuXplorer Subscription Ren...	-693.50	3,082,310.19
Bill Pmt - Check	07/07/2023	36928	Armadillo Lawn Care & Irrigation	Lawn Maintenance	-7,651.67	3,074,658.52
Bill Pmt - Check	07/07/2023	36929	Bleck Electric Company	Repairs	-3,285.00	3,071,373.52
Bill Pmt - Check	07/07/2023	36930	Brenntag Southwest, Inc.	Chemicals	-4,867.94	3,066,505.58
Bill Pmt - Check	07/07/2023	36931	Brian Heideman	Redesign Website	-750.00	3,065,755.58
Bill Pmt - Check	07/07/2023	36932	Callis Professional Services, L...	Office Cleaning	-370.70	3,065,384.88
Bill Pmt - Check	07/07/2023	36933	Citibank, N.A.	Mastercard	-15,355.72	3,050,029.16
Bill Pmt - Check	07/07/2023	36934	David McMullen	June Mileage & Phone Reimbu...	-2,645.62	3,047,383.54
Bill Pmt - Check	07/07/2023	36935	DPC Industries	Chlorine	-10,002.40	3,037,381.14
Bill Pmt - Check	07/07/2023	36936	Evoqua Water Technologies LLC	Chemicals	-51,341.80	2,986,039.34
Bill Pmt - Check	07/07/2023	36937	Fluid Meter Service, Corp.	Field Test Meters	-2,550.00	2,983,489.34
Bill Pmt - Check	07/07/2023	36938	Friedel Drilling Co.	Repair Well #15	-49,193.00	2,934,296.34
Bill Pmt - Check	07/07/2023	36939	Garrison Comal Supply, LLC	Parts	-51.37	2,934,244.97
Bill Pmt - Check	07/07/2023	36940	Hach Company	Lab Supplies	-177.02	2,934,067.95
Bill Pmt - Check	07/07/2023	36941	Hawkins	Chemicals	-10,773.00	2,923,294.95
Bill Pmt - Check	07/07/2023	36942	Hofmann's Supply	Cylinder Rental	-14.98	2,923,279.97
Bill Pmt - Check	07/07/2023	36943	Law Offices of Patricia Erlinger...	Groundwater Permitting	-1,004.50	2,922,275.47
Bill Pmt - Check	07/07/2023	36944	Louis T. Rosenberg	Legal Fees	-9,445.35	2,912,830.12
Bill Pmt - Check	07/07/2023	36945	Matheson Tri-Gas, Inc.	Oxygen & Cylinder Rental	-9,269.94	2,903,560.18
Bill Pmt - Check	07/07/2023	36946	New Braunfels Welders Supply	Cylinder Rental	-7.50	2,903,552.68
Bill Pmt - Check	07/07/2023	36947	Standard Insurance Company-...	Dental Insurance	-1,455.88	2,902,096.80
Bill Pmt - Check	07/07/2023	36948	Texas Land and Right of Way ...	Wells Ranch Water Lease Acq...	-2,790.00	2,899,306.80
Bill Pmt - Check	07/07/2023	36949	Trihydro Corporation	Wells Ranch III PER	-4,992.50	2,894,314.30
Bill Pmt - Check	07/07/2023	36950	Waste Management	Garbage Disposal	-1,230.45	2,893,083.85
Bill Pmt - Check	07/07/2023	36951	Williams Supply Company	Parts	-832.90	2,892,250.95
Bill Pmt - Check	07/07/2023	ACH	Texas Fleet Fuel	Vehicle/Equipment Fuel	-990.70	2,891,260.25
Deposit	07/10/2023			Deposit	123,894.97	3,015,155.22
Deposit	07/10/2023			Deposit	274,488.88	3,289,644.10
Liability Check	07/14/2023	ACH	TCDRS		-12,037.28	3,277,606.82
Liability Check	07/14/2023	ACH	TCDRS		-12,406.04	3,265,200.78
Paycheck	07/14/2023	Direct ...	Allman, Michael		-2,781.12	3,262,419.66
Liability Check	07/14/2023	ACH	TCDRS		-12,526.38	3,249,893.28
Paycheck	07/14/2023	Direct ...	Cruz, Edward D		-1,537.96	3,248,355.32
Paycheck	07/14/2023	Direct ...	Flores, Jimmy		-2,000.18	3,246,355.14
Paycheck	07/14/2023	Direct ...	Kirkland, Debra M		-1,927.38	3,244,427.76
Paycheck	07/14/2023	Direct ...	McKnight III, John R.		-1,514.39	3,242,913.37
Paycheck	07/14/2023	Direct ...	Moreno, Joe		-3,085.31	3,239,828.06
Paycheck	07/14/2023	Direct ...	Powers, Frantiska A		-1,545.31	3,238,282.75
Paycheck	07/14/2023	Direct ...	Saldana, Michael A		-1,406.81	3,236,875.94
Paycheck	07/14/2023	Direct ...	Shirk, Austin		-2,175.31	3,234,700.63
Paycheck	07/14/2023	Direct ...	Sims, Clarissa R		-1,425.09	3,233,275.54
Paycheck	07/14/2023	Direct ...	Wallace, Russell L		-1,558.91	3,231,716.63
Paycheck	07/14/2023	Direct ...	Whitelatch, Jr., Richard L		-1,481.09	3,230,235.54
Paycheck	07/14/2023	Direct ...	Kaufman, John M		-4,723.69	3,225,511.85
Paycheck	07/14/2023	Direct ...	McMullen, David W.		-3,527.75	3,221,984.10
Paycheck	07/14/2023	Direct ...	Ramos, Humberto		-3,130.75	3,218,853.35
Paycheck	07/14/2023	Direct ...	Telfer, Adam C		-3,280.76	3,215,572.59
Paycheck	07/14/2023	Direct ...	Wilkinson, Joan A.		-3,178.78	3,212,393.81
Liability Check	07/14/2023	ACH	John Hancock	401(k) Retirement Plan	-1,251.59	3,211,142.22
Liability Check	07/14/2023	EFTPS	US Treasury	74-2586063	-15,036.38	3,196,105.84

CANYON REGIONAL WATER AUTHORITY
Monthly General Account Check Register
As of July 31, 2023

Type	Date	Num	Name	Memo	Amount	Balance
Liability Check	07/14/2023	36952	California State Disbursement ...	200000001098628	-449.07	3,195,656.77
Liability Check	07/14/2023	36953	Office of the Attorney General	AG# 0012809999	-489.69	3,195,167.08
Transfer	07/14/2023			Pall Payment #6	40,284.00	3,235,451.08
Bill Pmt -Check	07/14/2023	36954	Brenntag Southwest, Inc.	Chemicals	-19,524.50	3,215,926.58
Bill Pmt -Check	07/14/2023	36955	Charter Communications	HC Internet	-125.64	3,215,800.94
Bill Pmt -Check	07/14/2023	36956	DPC Industries	Chlorine	-3,336.80	3,212,464.14
Bill Pmt -Check	07/14/2023	36957	DSHS Central Lab MC2004	Lab Testing	-327.46	3,212,136.68
Bill Pmt -Check	07/14/2023	36958	Helping Hand Hardware	Maintenance Supplies	-376.15	3,211,760.53
Bill Pmt -Check	07/14/2023	36959	John Kaufman	Mileage Reimbursement	-250.21	3,211,510.32
Bill Pmt -Check	07/14/2023	36960	Lhoist North America of Texas,...	Lime	-7,026.79	3,204,483.53
Bill Pmt -Check	07/14/2023	36961	Loflin Equipment Company	Repairs	-596.30	3,203,887.23
Bill Pmt -Check	07/14/2023	36962	New Braunfels Welders Supply	Nitrogen	-46.84	3,203,840.39
Bill Pmt -Check	07/14/2023	36963	Pall Corporation	6th Installment Payment	-40,284.00	3,163,556.39
Bill Pmt -Check	07/14/2023	36964	Sam's Club MC/SYNCB	Supplies	-940.78	3,162,615.61
Bill Pmt -Check	07/14/2023	36965	Texas Excavation Safety Syste...	Texas 811	-236.55	3,162,379.06
Bill Pmt -Check	07/14/2023	36966	Utility Engineering Group, PLLC	Engineering Fees	-2,660.00	3,159,719.06
Bill Pmt -Check	07/14/2023	36967	Waste Connections	Garbage Disposal	-377.17	3,159,341.89
Bill Pmt -Check	07/14/2023	36968	Wastewater Transport Service...	Sludge Removal	-3,833.02	3,155,508.87
Deposit	07/14/2023			Deposit	693,246.58	3,848,755.45
Check	07/17/2023	ACH	Benjamin T. Brizendine	Semi-Annual Water Lease Pay...	-9,378.49	3,839,376.96
Check	07/17/2023	ACH	Larry G. & Brenda K. Miles	Semi-Annual Water Lease Pay...	-7,021.29	3,832,355.67
Check	07/17/2023	ACH	Brown Trust	Semi-Annual Water Lease Pay...	-112,672.58	3,719,683.09
Check	07/17/2023	ACH	Bruce J. & Marcille D. Patteson	Semi-Annual Water Lease Pay...	-82,894.13	3,636,788.96
Check	07/17/2023	ACH	Carol L. Dodgen	Semi-Annual Water Lease Pay...	-5,688.84	3,631,100.12
Check	07/17/2023	ACH	Carrie Neal Haner Howington	Semi-Annual Water Lease Pay...	-564.83	3,630,535.29
Check	07/17/2023	ACH	Clayton L. Hines	Semi-Annual Water Lease Pay...	-137.94	3,630,397.35
Check	07/17/2023	ACH	Craig L. Hines - Water Lease	Semi-Annual Water Lease Pay...	-7,270.16	3,623,127.19
Check	07/17/2023	ACH	Dennis L. Harris	Semi-Annual Water Lease Pay...	-232.46	3,622,894.73
Check	07/17/2023	ACH	Diane Ritchie	Semi-Annual Water Lease Pay...	-15,781.32	3,607,113.41
Check	07/17/2023	ACH	Donald G. Tenberg	Semi-Annual Water Lease Pay...	-25,094.76	3,582,018.65
Check	07/17/2023	ACH	Dwayne A. Cusick	Semi-Annual Water Lease Pay...	-214.92	3,581,803.73
Check	07/17/2023	ACH	Gary D. Howell	Semi-Annual Water Lease Pay...	-1,121.81	3,580,681.92
Check	07/17/2023	ACH	Georganna P. Sherbert	Semi-Annual Water Lease Pay...	-564.83	3,580,117.09
Check	07/17/2023	ACH	Gordon N. Houston	Semi-Annual Water Lease Pay...	-583.47	3,579,533.62
Check	07/17/2023	ACH	Helene B. Murphy	Semi-Annual Water Lease Pay...	-409.92	3,579,123.70
Check	07/17/2023	ACH	Hines Family Liquids Trust	Semi-Annual Water Lease Pay...	-83,675.44	3,495,448.26
Check	07/17/2023	ACH	James B. Harris	Semi Annual Water Lease Pay...	-28,562.26	3,466,886.00
Check	07/17/2023	ACH	Jesse R. Trevino, Jr.	Semi-Annual Water Lease Pay...	-250.37	3,466,635.63
Check	07/17/2023	ACH	Jesse Trevino III	Semi-Annual Water Lease Pay...	-232.16	3,466,403.47
Check	07/17/2023	ACH	James D Bailey	Semi-Annual Water Lease Pay...	-876.41	3,465,527.06
Check	07/17/2023	ACH	Rosemary Mauermann	Semi-Annual Water Lease Pay...	-31,393.86	3,434,133.20
Check	07/17/2023	ACH	KP Ranch, LLC	Semi-Annual Water Lease Pay...	-11,027.89	3,423,105.31
Check	07/17/2023	ACH	Lewis Patteson	Semi-Annual Water Lease Pay...	-1,694.49	3,421,410.82
Check	07/17/2023	ACH	Lyman S. Davis, Trustee	Semi-Annual Water Lease Pay...	-1,008.68	3,420,402.14
Check	07/17/2023	ACH	Mark M. Howell	Semi-Annual Water Lease Pay...	-370.01	3,420,032.13
Check	07/17/2023	ACH	Michael D. & Miltzi Whorton	Semi-Annual Water Lease Pay...	-649.30	3,419,382.83
Check	07/17/2023	ACH	Michael L. & Patti R. Ewing	Semi-Annual Water Lease Pay...	-3,117.98	3,416,264.85
Check	07/17/2023	ACH	Michelle Lemoine	Semi Annual Water Lease Pay...	-2,862.62	3,413,402.23
Check	07/17/2023	ACH	MRJR, Ltd.	Semi-Annual Water Lease Pay...	-59,924.49	3,353,477.74
Check	07/17/2023	ACH	Rebecca Harris	Semi Annual Water Lease Pay...	-2,862.62	3,350,615.12
Check	07/17/2023	ACH	Richard L. Lott	Semi-Annual Water Lease Pay...	-9,728.03	3,340,887.09
Check	07/17/2023	ACH	Robert and Nichole Roberts	Semi-Annual Water Lease Pay...	-879.95	3,340,007.14
Check	07/17/2023	ACH	Robert Yuras	Semi-Annual Water Lease Pay...	-287.29	3,339,719.85
Check	07/17/2023	ACH	Sandra Dingler	Semi-Annual Water Lease Pay...	-7,257.77	3,332,462.08
Check	07/17/2023	ACH	Teresa or Jack Anderson	Semi-Annual Water Lease Pay...	-2,472.57	3,329,989.51
Check	07/17/2023	ACH	Terry Mauermann	Semi-Annual Water Lease Pay...	-18,329.03	3,311,660.48
Check	07/17/2023	ACH	William & Vernelle Jones	Semi-Annual Water Lease Pay...	-1,077.66	3,310,582.82
Check	07/17/2023	36845	Andrew Lakey	Semi-Annual Water Lease Pay...	-2,154.49	3,308,428.33
Check	07/17/2023	36846	Ariynn H & Nancy A Hartfiel	Semi-Annual Water Lease Pay...	-4,969.90	3,303,458.43
Check	07/17/2023	36847	Barbara A. Howard	Semi-Annual Water Lease Pay...	-2,500.39	3,300,958.04
Check	07/17/2023	36848	Beth's Boys, LLC	Semi-Annual Water Lease Pay...	-1,694.49	3,299,263.55
Check	07/17/2023	36849	Bobby B. Allen	Semi-Annual Water Lease Pay...	-9,254.30	3,290,009.25
Check	07/17/2023	36850	Bobby W. Bibbs II	Semi Annual Water Lease Pay...	-1,015.96	3,288,993.29
Check	07/17/2023	36851	Brauntex Materials Inc.-Water ...	Semi-Annual Water Lease Pay...	-9,774.09	3,279,219.20
Check	07/17/2023	36852	Brenda S. Robinson	Semi-Annual Water Lease Pay...	-24,359.79	3,254,859.41
Check	07/17/2023	36853	Carol Ann Lakey	Semi-Annual Water Lease Pay...	-2,306.62	3,252,552.79
Check	07/17/2023	36854	Chandra S. Katragadda	Semi-Annual Water Lease Pay...	-6,386.96	3,246,165.83
Check	07/17/2023	36855	Charles W. Cowey, Jr.	Semi-Annual Water Lease Pay...	-9,923.40	3,236,242.43
Check	07/17/2023	36856	Cheryl J. Moore	Semi-Annual Water Lease Pay...	-8,880.99	3,227,361.44
Check	07/17/2023	36857	Craig A. McClain	Semi-Annual Water Lease Pay...	-1,268.22	3,226,093.22
Check	07/17/2023	36858	D. Lee Edwards	Semi-Annual Water Lease Pay...	-30,391.02	3,195,702.20
Check	07/17/2023	36859	Darren & Laurie Yates	Semi-Annual Water Lease Pay...	-1,380.69	3,194,321.51
Check	07/17/2023	36860	Juan C. Rios & Debbie T. Rios	Semi-Annual Water Lease Pay...	-4,551.06	3,189,770.45
Check	07/17/2023	36861	Deborah A. Mc Cabe	Semi-Annual Water Lease Pay...	-104.00	3,189,666.45
Check	07/17/2023	36862	Debra P. Springs	Semi-Annual Water Lease Pay...	-6,764.45	3,182,902.00
Check	07/17/2023	36863	Donald D. Dashiell	Semi-Annual Water Lease Pay...	-7,862.14	3,175,039.86
Check	07/17/2023	36864	Douglas L Morton Exempt TR ...	Semi-Annual Water Lease Pay...	-21,198.16	3,153,841.70
Check	07/17/2023	36865	Edward & Adeline Zunker Fami...	Semi-Annual Water Lease Pay...	-1,010.24	3,152,831.46

CANYON REGIONAL WATER AUTHORITY
Monthly General Account Check Register
As of July 31, 2023

Type	Date	Num	Name	Memo	Amount	Balance
Check	07/17/2023	36866	Edward K Morton Exempt TR 2...	Semi-Annual Water Lease Pay...	-21,198.16	3,131,633.30
Check	07/17/2023	36867	Frost Bank Successor Trustee	Semi-Annual Water Lease Pay...	-8,819.30	3,122,814.00
Check	07/17/2023	36868	GRTR Ranch Properties	Semi-Annual Water Lease Pay...	-4,740.58	3,118,073.42
Check	07/17/2023	36869	H. Paul Dangler, Sr.	Semi-Annual Water Lease Pay...	-8,336.28	3,109,737.14
Check	07/17/2023	36870	Harold E. Alves, Jr.	Semi-Annual Water Lease Pay...	-5,863.65	3,103,873.49
Check	07/17/2023	36871	Hilmar D. Blumberg	Semi-Annual Water Lease Pay...	-119,701.60	2,984,171.89
Check	07/17/2023	36872	Howard Williamson III	Semi-Annual Water Lease Pay...	-143,842.80	2,840,329.09
Check	07/17/2023	36873	Isom L. Cowey	Semi-Annual Water Lease Pay...	-7,078.68	2,833,250.41
Check	07/17/2023	36874	James and Janie Streeley	Semi-Annual Water Lease Pay...	-3,867.43	2,829,382.98
Check	07/17/2023	36875	James M. McClain	Semi-Annual Water Lease Pay...	-1,268.22	2,828,114.76
Check	07/17/2023	36876	James D. Weidner	Semi-Annual Water Lease Pay...	-2,536.44	2,825,578.32
Check	07/17/2023	36877	Janelle Trammell	Semi-Annual Water Lease Pay...	-16,756.12	2,808,822.20
Check	07/17/2023	36878	Javier Jimenez	Semi-Annual Water Lease Pay...	-1,026.34	2,807,795.86
Check	07/17/2023	36879	Javier Ramirez & Velma Monta...	Semi-Annual Water Lease Pay...	-2,696.77	2,805,099.09
Check	07/17/2023	36880	Jay Patton White	Semi-Annual Water Lease Pay...	-5,951.52	2,799,147.57
Check	07/17/2023	36881	Jennifer S. McGee	Semi-Annual Water Lease Pay...	-1,451.89	2,797,695.68
Check	07/17/2023	36882	Jessie D. Perez, Jr.	Semi-Annual Water Lease Pay...	-2,818.00	2,794,877.68
Check	07/17/2023	36883	Jesus G. Tristan	Semi-Annual Water Lease Pay...	-704.50	2,794,173.18
Check	07/17/2023	36884	Joan Torstrick	Semi-Annual Water Lease Pay...	-232.46	2,793,940.72
Check	07/17/2023	36885	John B. & Georgia A. Hernandez	Semi-Annual Water Lease Pay...	-13,250.11	2,780,690.61
Check	07/17/2023	36886	John C. Pannell	Semi-Annual Water Lease Pay...	-10,289.30	2,770,401.31
Check	07/17/2023	36887	John H. Brite	Semi-Annual Water Lease Pay...	-9,717.51	2,760,683.80
Check	07/17/2023	36888	John M. Cowey	Semi-Annual Water Lease Pay...	-7,708.51	2,752,975.29
Check	07/17/2023	36889	Jordan T. Blumberg 1994 IRR. ...	Semi-Annual Water Lease Pay...	-23,772.18	2,729,203.11
Check	07/17/2023	36890	Joseph Anthony Burris	Semi-Annual Water Lease Pay...	-4,224.18	2,724,978.93
Check	07/17/2023	36891	Joyce Soeffe	Semi-Annual Water Lease Pay...	-9,864.97	2,715,113.96
Check	07/17/2023	36892	Kelli Jo Volek	Semi-Annual Water Lease Pay...	-143,842.80	2,571,271.16
Check	07/17/2023	36893	Larry & Alice Moltz	Semi-Annual Water Lease Pay...	-21,509.55	2,549,761.61
Check	07/17/2023	36894	Lawrence O. & Camille T. Sch...	Semi-Annual Water Lease Pay...	-7,352.75	2,542,408.86
Check	07/17/2023	36895	Leroy John Skloss	Semi-Annual Water Lease Pay...	-704.50	2,541,704.36
Check	07/17/2023	36896	Linda Lou Odom	Semi-Annual Water Lease Pay...	-1,945.83	2,539,758.53
Check	07/17/2023	36897	Louie E. Soeffe	Semi-Annual Water Lease Pay...	-1,945.83	2,537,812.70
Check	07/17/2023	36898	Luis or Carmen Rivera	Semi-Annual Water Lease Pay...	-243.33	2,537,569.37
Check	07/17/2023	36899	Luke W. Griffith	Semi-Annual Water Lease Pay...	-10,289.30	2,527,280.07
Check	07/17/2023	36900	Marvin L. Miles	Semi-Annual Water Lease Pay...	-7,021.36	2,520,258.71
Check	07/17/2023	36901	Mary Lorna Dezell	Semi-Annual Water Lease Pay...	-7,732.32	2,512,526.39
Check	07/17/2023	36902	Matthew J. Breidenbaugh	Semi-Annual Water Lease Pay...	-1,799.50	2,510,726.89
Check	07/17/2023	36903	Matthew L. Tenberg	Semi-Annual Water Lease Pay...	-1,566.76	2,509,160.13
Check	07/17/2023	36904	Michael L. Cowey	Semi-Annual Water Lease Pay...	-11,566.42	2,497,593.71
Check	07/17/2023	36905	Mike W. Bond or Connie L. Bond	Semi-Annual Water Lease Pay...	-20,256.28	2,477,337.43
Check	07/17/2023	36906	Molly Neal Patteson	Semi-Annual Water Lease Pay...	-564.83	2,476,772.60
Check	07/17/2023	36907	Mund Grandchildren's Trust of ...	Semi-Annual Water Lease Pay...	-11,076.02	2,465,696.58
Check	07/17/2023	36908	Nelda J. Patteson	Semi-Annual Water Lease Pay...	-1,694.49	2,464,002.09
Check	07/17/2023	36909	Otto E. Soeffe	Semi-Annual Water Lease Pay...	-1,945.83	2,462,056.26
Check	07/17/2023	36910	Quest Trust FBO Sean M Hallo...	Semi-Annual Water Lease Pay...	-813.70	2,461,242.56
Check	07/17/2023	36911	Ray M. Brite	Semi-Annual Water Lease Pay...	-10,570.66	2,450,671.90
Check	07/17/2023	36912	Roger A. & Susan J. Edwards	Semi-Annual Water Lease Pay...	-6,535.27	2,444,136.63
Check	07/17/2023	36913	Spillers Farm & Ranch, LLC	Semi-Annual Water Lease Pay...	-11,113.80	2,433,022.83
Check	07/17/2023	36914	Roland B. Blumberg 1994 IRR....	Semi-Annual Water Lease Pay...	-23,772.18	2,409,250.65
Check	07/17/2023	36915	Rolling Butler, LLC	Semi-Annual Water Lease Pay...	-5,080.24	2,404,170.41
Check	07/17/2023	36916	Shannon Harris	Semi-Annual Water Lease Pay...	-2,862.62	2,401,307.79
Check	07/17/2023	36917	Sidney Allen Littlefield	Semi-Annual Water Lease Pay...	-96,418.57	2,304,889.22
Check	07/17/2023	36918	Thomas P. Taggart	Semi-Annual Water Lease Pay...	-1,580.20	2,303,309.02
Check	07/17/2023	36919	Truitt Land Holdings, LLC	Semi-Annual Water Lease Pay...	-7,258.18	2,296,050.84
Check	07/17/2023	36920	Wilbon P. Davis	Semi-Annual Water Lease Pay...	-10,824.19	2,285,226.65
Check	07/17/2023	36921	William Brent Christian	Semi-Annual Water Lease Pay...	-16,756.12	2,268,470.53
Check	07/17/2023	36922	William Ray Engvall	Semi-Annual Water Lease Pay...	-21,778.28	2,246,692.25
Check	07/17/2023	36923	William E. Pape	Semi-Annual Water Lease Pay...	-6,964.48	2,239,727.77
Check	07/17/2023	36924	Willard James Stewart	Semi-Annual Water Lease Pay...	-31,267.13	2,208,460.64
Bill Pmt -Check	07/17/2023	ACH	Verve Cloud, Inc.	Telephone	-364.64	2,208,096.00
Deposit	07/17/2023			Deposit	383,860.82	2,591,956.82
Bill Pmt -Check	07/17/2023	ACH	CPS - I 10	I-10 Utilities	-11.92	2,591,944.90
Bill Pmt -Check	07/19/2023	ACH	AT&T Mobility		-2,158.78	2,589,786.12
Transfer	07/20/2023			Funds Transfer	-44,958.43	2,544,827.69
Transfer	07/20/2023			Funds Transfer	-28,559.65	2,516,268.04
Transfer	07/20/2023			Funds Transfer	-53,348.21	2,462,919.83
Transfer	07/20/2023			Funds Transfer	-18,294.56	2,444,625.27
Transfer	07/20/2023			Monthly Membrane Transfer	-5,155.41	2,439,469.86
Transfer	07/20/2023			Monthly Membrane Transfer	-39,998.40	2,399,471.46
Transfer	07/20/2023			LD-Monthly Bond Payment Tra...	-148,238.65	2,251,232.81
Transfer	07/20/2023			Bond Payment Transfer	-24,182.49	2,227,050.32
Transfer	07/20/2023			MC-Bond Payment Transfer	-154,239.46	2,072,810.86
Transfer	07/20/2023			Bond Payment Transfer	-553.23	2,072,257.63
Transfer	07/20/2023			Bond Payment Transfer	-33,386.91	2,038,870.72
Transfer	07/20/2023			Bond Payment Transfer	-58,928.72	1,979,942.00
Transfer	07/20/2023			Bond Payment Transfer	-14,768.85	1,965,173.15
Transfer	07/20/2023			Bond Payment Transfer	-259,041.10	1,706,132.05
Transfer	07/20/2023			Bond Payment Transfer	-249,466.88	1,456,665.17

CANYON REGIONAL WATER AUTHORITY
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Type	Date	Num	Name	Memo	Amount	Balance
Transfer	07/20/2023			Bond Payment Transfer	-98,519.91	1,358,145.26
Transfer	07/20/2023			Bond Payment Transfer	-22,479.93	1,335,665.33
Transfer	07/20/2023			Bond Payment Transfer	-9,982.18	1,325,683.15
Transfer	07/20/2023			June Overages	-7.36	1,325,675.79
Bill Pmt -Check	07/20/2023	ACH	Avesis	Employee Vision Insurance	-221.60	1,325,454.19
Deposit	07/20/2023			Deposit	939,093.32	2,264,547.51
Bill Pmt -Check	07/21/2023	ACH	GVEC - Lake Dunlap	05/25/2023-06/25/2023	-67,982.72	2,196,564.79
Bill Pmt -Check	07/21/2023	ACH	GVEC - Leissner Booster Stn #2	05/25/2023-06/25/2023	-15,616.49	2,180,948.30
Bill Pmt -Check	07/21/2023	ACH	GVEC - Leissner Rd Booster S...	05/25/2023-06/25/2023	-14,789.21	2,166,159.09
Bill Pmt -Check	07/21/2023	ACH	GVEC - Wagner Booster	05/25/2023-06/25/2023	-20,983.17	2,145,175.92
Bill Pmt -Check	07/21/2023	ACH	GVEC - WR Plant	05/25/2023-06/25/2023	-17,156.26	2,128,019.66
Bill Pmt -Check	07/21/2023	ACH	GVEC - WR Plant #2	05/25/2023-06/25/2023	-20,533.59	2,107,486.07
Bill Pmt -Check	07/21/2023	ACH	Bluebonnet Electric	HC Utilities - 5000057123	-16,564.41	2,090,921.66
Check	07/21/2023	36969	Texas Water Utilities Association	Membership-Armadillo	-210.00	2,090,711.66
Bill Pmt -Check	07/21/2023	ACH	Texas Fleet Fuel	Vehicle/Equipment Fuel	-744.64	2,089,967.02
Bill Pmt -Check	07/21/2023	36970	5S Service Company LLC	HC Repairs-VFD for Sub Pump	-2,500.00	2,087,467.02
Bill Pmt -Check	07/21/2023	36971	Aflac	Employee Voluntary Insurance	-1,161.36	2,086,305.66
Bill Pmt -Check	07/21/2023	36972	Alliance Regional Water Autho...	May - July 2023 Operations & ...	-1,247,081.00	839,224.66
Bill Pmt -Check	07/21/2023	36973	Analytical Environmental Labor...	Lab Testing	-540.00	838,684.66
Bill Pmt -Check	07/21/2023	36974	Anytime Fuel Pros LLC	Diesel for Generators-HC	-567.94	838,116.72
Bill Pmt -Check	07/21/2023	36975	Arduro Group, Inc.	HCWTP Ozone Study	-13,684.76	824,431.96
Bill Pmt -Check	07/21/2023	36976	Attorney R. L. Wilson	Legal Fees	-14,837.13	809,594.83
Bill Pmt -Check	07/21/2023	36977	Avesis	Employee Vision Insurance	-230.07	809,364.76
Bill Pmt -Check	07/21/2023	36978	Bleck Electric Company	Repairs	-5,024.00	804,340.76
Bill Pmt -Check	07/21/2023	36979	Brenntag Southwest, Inc.	Chemicals	-7,345.73	796,995.03
Bill Pmt -Check	07/21/2023	36980	Core & Main LP	Check Valves	-4,686.50	792,308.53
Bill Pmt -Check	07/21/2023	36981	Dex Imaging	Admin Copier	-719.81	791,588.72
Bill Pmt -Check	07/21/2023	36982	DPC Industries	Chlorine	-651.76	790,936.96
Bill Pmt -Check	07/21/2023	36983	DPC Industries-Cylinder Rental	Cylinder Rental	-990.00	789,946.96
Bill Pmt -Check	07/21/2023	36984	Dynamic Mechanical Contracting	Repairs @ 1604	-127.50	789,819.46
Bill Pmt -Check	07/21/2023	36985	G.A. Powers Co.	Parts	-372.63	789,446.83
Bill Pmt -Check	07/21/2023	36986	Gallegos Engineering, Inc.	HC Transmission Main Single ...	-6,975.00	782,471.83
Bill Pmt -Check	07/21/2023	36987	GBRA-Raw Water & TM	12613 A/F @ \$165 & Raw Wat...	-237,297.51	545,174.32
Bill Pmt -Check	07/21/2023	36988	Gold Star Exterminators	Pest Control	-415.00	544,759.32
Bill Pmt -Check	07/21/2023	36989	Guadalupe-Blanco River Autho...	Lab fees	-2,564.00	542,195.32
Bill Pmt -Check	07/21/2023		GVEC - Internet	QuickBooks generated zero a...	0.00	542,195.32
Bill Pmt -Check	07/21/2023	36990	Hach Company	Lab Supplies	-5,530.62	536,664.70
Bill Pmt -Check	07/21/2023	36991	Hawkins	Chemicals	-17,955.00	518,709.70
Bill Pmt -Check	07/21/2023	36992	Ingersoll Rand Company	Compressor PM's	-4,386.22	514,323.48
Bill Pmt -Check	07/21/2023	36993	Jimmy Flores.	Mileage Reimbursement	-311.13	514,012.35
Bill Pmt -Check	07/21/2023	36994	Lhoist North America of Texas,...	Lime	-6,573.12	507,439.23
Bill Pmt -Check	07/21/2023	36995	New Braunfels Utilities	46 Standpipe Utilities	-30.78	507,408.45
Bill Pmt -Check	07/21/2023	36996	Verve Cloud, Inc.	Telephone	-365.24	507,043.21
Bill Pmt -Check	07/21/2023	36997	Wastewater Transport Service...	Sudge Removal	-9,196.62	497,846.59
Check	07/21/2023	36998	Mary Harper	Bluebonnet Electric Easement ...	-1,000.00	496,846.59
Bill Pmt -Check	07/24/2023	ACH	TML Health	VOID: Employee Health Insura...	0.00	496,846.59
Deposit	07/24/2023			Deposit	404,794.66	901,641.25
Bill Pmt -Check	07/24/2023	ACH	CPS - 1518	Utilities	-152.23	901,489.02
Liability Check	07/25/2023	ACH	Texas Workforce Commission	99-882188-6	-4.51	901,484.51
Check	07/25/2023	37000	Void	Void	0.00	901,484.51
Deposit	07/25/2023			Deposit	332,048.08	1,233,532.59
General Journal	07/25/2023	07-03	TML Health	TML Online ACH Payment Fee	-1.50	1,233,531.09
Bill Pmt -Check	07/26/2023	ACH	CPS - 1604	Utilities	-30,998.16	1,202,532.93
Bill Pmt -Check	07/26/2023	36999	Humberto Ramos.	July Mileage	-655.66	1,201,877.27
Paycheck	07/26/2023	37001	Ramos, Humberto		-11,998.05	1,189,879.22
Liability Check	07/26/2023	EFTPS	US Treasury	74-2586063	-6,885.32	1,182,993.90
Liability Check	07/26/2023	ACH	John Hancock	401(k) Retirement Plan	-400.00	1,182,593.90
Paycheck	07/28/2023	Direct ...	Allman, Michael		-2,847.68	1,179,746.22
Paycheck	07/28/2023	Direct ...	Cruz, Edward D		-1,470.80	1,178,275.42
Paycheck	07/28/2023	Direct ...	Flores, Jimmy		-2,436.22	1,175,839.20
Paycheck	07/28/2023	Direct ...	Kirkland, Debra M		-1,654.59	1,174,184.61
Paycheck	07/28/2023	Direct ...	McKnight III, John R.		-1,576.63	1,172,607.98
Paycheck	07/28/2023	Direct ...	Moreno, Joe		-3,143.42	1,169,464.56
Paycheck	07/28/2023	Direct ...	Powers, Frantiska A		-1,626.49	1,167,838.07
Paycheck	07/28/2023	Direct ...	Saldana, Michael A		-1,621.52	1,166,216.55
Paycheck	07/28/2023	Direct ...	Shirk, Austin		-1,766.42	1,164,450.13
Paycheck	07/28/2023	Direct ...	Sims, Clarissa R		-1,793.74	1,162,656.39
Paycheck	07/28/2023	Direct ...	Wallace, Russell L		-2,145.86	1,160,510.53
Paycheck	07/28/2023	Direct ...	Whitelatch, Jr., Richard L		-1,591.84	1,158,918.69
Paycheck	07/28/2023	Direct ...	Wilkinson, Joan A.		-3,178.79	1,155,739.90
Paycheck	07/28/2023	Direct ...	Kaufman, John M		-4,723.69	1,151,016.21
Paycheck	07/28/2023	Direct ...	McMullen, David W.		-3,527.74	1,147,488.47
Paycheck	07/28/2023	Direct ...	Ramos, Humberto		-3,130.76	1,144,357.71
Paycheck	07/28/2023	Direct ...	Telfer, Adam C		-3,280.76	1,141,076.95
Liability Check	07/28/2023	EFTPS	US Treasury	74-2586063	-15,604.44	1,125,472.51
Liability Check	07/28/2023	ACH	John Hancock	401(k) Retirement Plan	-1,263.18	1,124,209.33
Liability Check	07/28/2023	37002	California State Disbursement ...	200000001098628	-449.07	1,123,760.26
Liability Check	07/28/2023	37003	Office of the Attorney General	AG# 0012809999	-489.69	1,123,270.57

CANYON REGIONAL WATER AUTHORITY
Monthly General Account Check Register
As of July 31, 2023

Type	Date	Num	Name	Memo	Amount	Balance
Check	07/28/2023	37004	Charles C. Bailey	Monthly Governmental Consult...	-2,000.00	1,121,270.57
Bill Pmt -Check	07/28/2023	37005	B&B Family Partnership	Baugh Water Lease 320 AF @...	-2,000.00	1,119,270.57
Bill Pmt -Check	07/28/2023	37006	Brenntag Southwest, Inc.	Chemicals	-13,728.00	1,105,542.57
Bill Pmt -Check	07/28/2023	37007	DPC Industries	Chemicals	-3,988.56	1,101,554.01
Bill Pmt -Check	07/28/2023	37008	Ewald Kubota, Inc.	MX4800 Tractor PM	-1,626.40	1,099,927.61
Bill Pmt -Check	07/28/2023	37009	Frantiska Powers	Mileage Reimbursement	-137.55	1,099,790.06
Bill Pmt -Check	07/28/2023	37010	Hawkins	Chemicals	-25,137.00	1,074,653.06
Bill Pmt -Check	07/28/2023	37011	Hofmann's Supply	Nitrogen	-36.01	1,074,617.05
Bill Pmt -Check	07/28/2023	37012	Lhoist North America of Texas,...	Lime	-6,725.02	1,067,892.03
Bill Pmt -Check	07/28/2023	37013	Pollution Control Services	Lab Testing	-1,922.00	1,065,970.03
Bill Pmt -Check	07/28/2023	37014	Standard Insurance Company	Employee Life & LTD Insurance	-778.11	1,065,191.92
Bill Pmt -Check	07/28/2023	37015	Trihydro Corporation	Wells Ranch III PER	-6,013.75	1,059,178.17
Bill Pmt -Check	07/28/2023	37016	TX Health Benefits Pool	Employee Health Insurance	-16,791.38	1,042,386.79
Bill Pmt -Check	07/28/2023	37017	Michael C. Allman	VOID: Mileage & Supplies Rei...	0.00	1,042,386.79
Bill Pmt -Check	07/28/2023	37018	Michael C. Allman	Mileage & Supplies Reimb	-327.43	1,042,059.36
Bill Pmt -Check	07/28/2023	ACH	TML Health	Employee Health Insurance	-16,791.38	1,025,267.98
General Journal	07/28/2023	07-04	TML Health	TML Insurance ACH Payment ...	-1.50	1,025,266.48
Deposit	07/31/2023			Interest	910.95	1,026,177.43
Total 1006 - First United Checking #5207					-2,100,890.30	1,026,177.43
Total 1001 - First United Bank					-2,100,890.30	1,026,177.43
TOTAL					-2,100,890.30	1,026,177.43

CANYON REGIONAL WATER AUTHORITY
Legal Fees by Payee
October 2022 through July 2023

Type	Date	Num	Name	Memo	Amount	Balance
Attorney R. L. Wilson						
Bill	12/31/2022	3586	Attorney R. L. Wilson	September-December 2022	20,899.50	20,899.50
Bill	12/31/2022	3588	Attorney R. L. Wilson	September-December 2022	5,282.25	26,181.75
Bill	12/31/2022	3587	Attorney R. L. Wilson	September-December 2022	1,185.00	27,366.75
Bill	02/10/2023	3605	Attorney R. L. Wilson	HC Pall Agreement	2,190.00	29,556.75
Bill	02/10/2023	3607	Attorney R. L. Wilson	LD Nanostone	4,275.00	33,831.75
Bill	02/10/2023	3604	Attorney R. L. Wilson	General Matters	6,590.00	40,421.75
Bill	02/10/2023	3606	Attorney R. L. Wilson	WR Generator Project	3,143.95	43,565.70
Bill	02/28/2023	3629	Attorney R. L. Wilson	General Matters	6,645.00	50,210.70
Bill	02/28/2023	3630	Attorney R. L. Wilson	HC Pall Agreement	2,895.00	53,105.70
Bill	02/28/2023	3631	Attorney R. L. Wilson	LD Nanostone	3,028.42	56,134.12
Bill	02/28/2023	3632	Attorney R. L. Wilson	WR Generator Project	3,647.11	59,781.23
Bill	03/31/2023	3649	Attorney R. L. Wilson	WR Generator Project	2,925.00	62,706.23
Bill	03/31/2023	3648	Attorney R. L. Wilson	Nanostone	825.00	63,531.23
Bill	03/31/2023	3647	Attorney R. L. Wilson	Pall Trailer	405.00	63,936.23
Bill	03/31/2023	3646	Attorney R. L. Wilson	General Matters-Policies	7,995.00	71,931.23
Bill	04/30/2023	3666	Attorney R. L. Wilson	HC WTP	825.00	72,756.23
Bill	04/30/2023	3665	Attorney R. L. Wilson	Policy Committee & Contracts	4,200.00	76,956.23
Bill	04/30/2023	3665	Attorney R. L. Wilson	Policy Committee & Contracts	2,280.00	79,236.23
Bill	04/30/2023	3665	Attorney R. L. Wilson	Policy Committee & Contracts	3,150.00	82,386.23
Bill	04/30/2023	3667	Attorney R. L. Wilson	Wells Ranch	5,720.88	88,107.11
Bill	05/31/2023	3684	Attorney R. L. Wilson	Hays Caldwell Overages & Contract Amendment	7,607.13	95,714.24
Bill	05/31/2023	3683	Attorney R. L. Wilson	General Matters	2,775.00	98,489.24
Bill	05/31/2023	3685	Attorney R. L. Wilson	Wells Ranch	4,455.00	102,944.24
Total Attorney R. L. Wilson					102,944.24	102,944.24
Bryant Law PC						
Bill	07/31/2023	1790	Bryant Law PC	RE: Louis Rosenberg	3,863.45	3,863.45
Bill	07/31/2023	1791	Bryant Law PC	RE: Louis Rosenberg	1,320.00	5,183.45
Bill	07/31/2023	1792	Bryant Law PC	RE: Louis Rosenberg	3,974.90	9,158.35
Bill	07/31/2023	1793	Bryant Law PC	RE: Louis Rosenberg	3,750.00	12,908.35
Total Bryant Law PC					12,908.35	12,908.35
Charles C. Bailey						
Che...	10/28/2022	35928	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	2,000.00
Che...	12/02/2022	36024	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	4,000.00
Che...	12/22/2022	36113	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	6,000.00
Che...	02/03/2023	36315	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	8,000.00
Che...	03/03/2023	36416	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	10,000.00
Che...	03/29/2023	36511	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	12,000.00
Che...	04/28/2023	36618	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	14,000.00
Che...	05/26/2023	36716	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	16,000.00
Che...	06/30/2023	36824	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	18,000.00
Che...	07/28/2023	37004	Charles C. Bailey	Monthly Governmental Consulting Services	2,000.00	20,000.00
Total Charles C. Bailey					20,000.00	20,000.00
Employers Council						
Bill	04/19/2023	461185	Employers Council	Legal Services-Employee Policy Manual	810.00	810.00
Total Employers Council					810.00	810.00
Louis T. Rosenberg						
Bill	10/31/2022	5005	Louis T. Rosenberg	Personnel Matters	1,114.00	1,114.00
Bill	10/31/2022	5006	Louis T. Rosenberg	Policy & Legislation Committee	5,733.76	6,847.76
Bill	10/31/2022	5004	Louis T. Rosenberg	Nanostone Contract	264.00	7,111.76
Bill	10/31/2022	5007	Louis T. Rosenberg	SAWS Contract Attorney Inquiry	2,521.00	9,632.76
Bill	10/31/2022	5002	Louis T. Rosenberg	Construction Committee	1,749.63	11,382.39
Bill	10/31/2022	5001	Louis T. Rosenberg	Bolton Road Meter Station	179.50	11,561.89
Bill	10/31/2022	5003	Louis T. Rosenberg	General Matters	5,794.63	17,356.52
Bill	11/30/2022	5080	Louis T. Rosenberg	Wheeling Agreement	302.50	17,659.02
Bill	11/30/2022	5074	Louis T. Rosenberg	HC Contract Water Rights Issues	2,089.50	19,748.52
Bill	11/30/2022	5072	Louis T. Rosenberg	Construction Committee	385.00	20,133.52
Bill	11/30/2022	5077	Louis T. Rosenberg	Policy & Legislation Committee	7,344.56	27,478.08
Bill	11/30/2022	5075	Louis T. Rosenberg	Nanostone Contract	1,012.50	28,490.58
Bill	11/30/2022	5078	Louis T. Rosenberg	SAWS Water Contract	152.00	28,642.58
Bill	11/30/2022	5076	Louis T. Rosenberg	Personnel Matters	6,115.00	34,757.58
Bill	11/30/2022	5073	Louis T. Rosenberg	General Matters	6,266.13	41,023.71

CANYON REGIONAL WATER AUTHORITY
Legal Fees by Payee
October 2022 through July 2023

Type	Date	Num	Name	Memo	Amount	Balance
Bill	12/31/2022	5152	Louis T. Rosenberg	General Matters	1,188.00	42,211.71
Bill	12/31/2022		Louis T. Rosenberg	Construction Committee	380.00	42,591.71
Bill	12/31/2022	5151	Louis T. Rosenberg	WR Generators	3,980.00	46,571.71
Bill	12/31/2022	5158	Louis T. Rosenberg	Wheeling Agreement	609.00	47,180.71
Bill	12/31/2022	5154	Louis T. Rosenberg	Personnel Matters	778.00	47,958.71
Bill	12/31/2022	5155	Louis T. Rosenberg	Policy & Legislation Committee	3,575.76	51,534.47
Bill	12/31/2022	5156	Louis T. Rosenberg	SAWS	1,316.50	52,850.97
Bill	12/31/2022	5153	Louis T. Rosenberg	HC Water Rights Issues	3,003.00	55,853.97
Bill	12/31/2022	5157	Louis T. Rosenberg	Wells Ranch Phase II	1,155.00	57,008.97
Bill	01/31/2023	5215	Louis T. Rosenberg	Legislation	632.50	57,641.47
Bill	01/31/2023	5217	Louis T. Rosenberg	SAWS Water Contract	803.50	58,444.97
Bill	01/31/2023	5216	Louis T. Rosenberg	Policy Committee	7,568.90	66,013.87
Bill	01/31/2023	5212	Louis T. Rosenberg	WR Generator Contract	3,777.50	69,791.37
Bill	01/31/2023	5213	Louis T. Rosenberg	General Matters	2,007.95	71,799.32
Bill	01/31/2023	5214	Louis T. Rosenberg	HC Wheeling Agreement	6,050.50	77,849.82
Bill	02/28/2023	5285	Louis T. Rosenberg	General Matters	4,807.45	82,657.27
Bill	02/28/2023	5283	Louis T. Rosenberg	Construction Committee	1,186.50	83,843.77
Bill	02/28/2023	5288	Louis T. Rosenberg	Nanostone	4,227.50	88,071.27
Bill	02/28/2023	5287	Louis T. Rosenberg	Legislation	1,605.00	89,676.27
Bill	02/28/2023	5289	Louis T. Rosenberg	Policy Committee	6,806.85	96,483.12
Bill	02/28/2023	5290	Louis T. Rosenberg	SAWS	2,748.50	99,231.62
Bill	02/28/2023		Louis T. Rosenberg	HC Wheeling Agreement	813.50	100,045.12
Bill	02/28/2023	5284	Louis T. Rosenberg	WR Generator	3,251.06	103,296.18
Bill	03/31/2023	5357	Louis T. Rosenberg	WR Generator Project	1,619.50	104,915.68
Bill	03/31/2023	5356	Louis T. Rosenberg	Construction Committee	812.00	105,727.68
Bill	03/31/2023	5358	Louis T. Rosenberg	Funding Opportunities	475.50	106,203.18
Bill	03/31/2023	5354	Louis T. Rosenberg	Policy Committee	1,508.75	107,711.93
Bill	03/31/2023	5355	Louis T. Rosenberg	Crystal Clear/CRWA Agreement	549.00	108,260.93
Bill	03/31/2023	5360	Louis T. Rosenberg	Wheeling Agreement	448.00	108,708.93
Bill	03/31/2023	5361	Louis T. Rosenberg	Legislation	2,356.00	111,064.93
Bill	03/31/2023	5362	Louis T. Rosenberg	Nanostone	1,241.50	112,306.43
Bill	03/31/2023	5363	Louis T. Rosenberg	Policy Committee	7,654.30	119,960.73
Bill	03/31/2023	5365	Louis T. Rosenberg	SAWS	1,124.50	121,085.23
Bill	03/31/2023	5364	Louis T. Rosenberg	Retail Service Issues	1,640.00	122,725.23
Bill	03/31/2023	5359	Louis T. Rosenberg	General Matters	5,535.95	128,261.18
Bill	04/30/2023	5434	Louis T. Rosenberg	GCUWCD Export Fee	251.50	128,512.68
Bill	04/30/2023	5431	Louis T. Rosenberg	Legislation	4,043.50	132,556.18
Bill	04/30/2023	5433	Louis T. Rosenberg	Wells Ranch III	334.00	132,890.18
Bill	04/30/2023	5427	Louis T. Rosenberg	Crystal Clear/CRWA Agreement	334.00	133,224.18
Bill	04/30/2023	5428	Louis T. Rosenberg	Shannon-Monk	821.00	134,045.18
Bill	04/30/2023	5432	Louis T. Rosenberg	Policy Committee	3,793.45	137,838.63
Bill	04/30/2023	5430	Louis T. Rosenberg	Hays Caldwell	2,786.00	140,624.63
Bill	04/30/2023	5429	Louis T. Rosenberg	General Matters	3,515.45	144,140.08
Bill	05/31/2023	5491	Louis T. Rosenberg	Shannon-Monk	82.50	144,222.58
Bill	05/31/2023	5493	Louis T. Rosenberg	HC Wheeling Contract	4,000.00	148,222.58
Bill	05/31/2023	5494	Louis T. Rosenberg	Policy Committee	3,822.90	152,045.48
Bill	05/31/2023	5492	Louis T. Rosenberg	General Matters	4,725.50	156,770.98
Bill	06/30/2023	5558	Louis T. Rosenberg	General Matters	3,358.40	160,129.38
Bill	06/30/2023	5559	Louis T. Rosenberg	HC Wheeling Agreements	196.50	160,325.88
Bill	06/30/2023	5557	Louis T. Rosenberg	Construction Committee	330.00	160,655.88
Bill	06/30/2023	5560	Louis T. Rosenberg	Legislation	156.00	160,811.88
Bill	06/30/2023	5561	Louis T. Rosenberg	Policy Committee	5,097.95	165,909.83
Total Louis T. Rosenberg					165,909.83	165,909.83
TOTAL					302,572.42	302,572.42

CANYON REGIONAL WATER AUTHORITY
Legal Fees by Category
October 2022 through July 2023

Type	Date	Num	Name	Memo	Amount
Other Charges					
Legal & professional fees					
Contracts					
Bill	10/31/2022	5004	Louis T. Rosenberg	Nanostone Contract	264.00
Bill	10/31/2022	5007	Louis T. Rosenberg	SAWS Contract Attorney Inquiry	2,521.00
Bill	11/30/2022	5080	Louis T. Rosenberg	Wheeling Agreement	302.50
Bill	11/30/2022	5075	Louis T. Rosenberg	Nanostone Contract	1,012.50
Bill	11/30/2022	5078	Louis T. Rosenberg	SAWS Water Contract	152.00
Bill	12/31/2022	5158	Louis T. Rosenberg	Wheeling Agreement	609.00
Bill	12/31/2022	5156	Louis T. Rosenberg	SAWS	1,316.50
Bill	12/31/2022	3587	Attorney R. L. Wilson	September-December 2022	1,185.00
Bill	01/31/2023	5217	Louis T. Rosenberg	SAWS Water Contract	803.50
Bill	01/31/2023	5214	Louis T. Rosenberg	HC Wheeling Agreement	6,050.50
Bill	02/10/2023	3605	Attorney R. L. Wilson	HC Pall Agreement	2,190.00
Bill	02/10/2023	3607	Attorney R. L. Wilson	LD Nanostone	4,275.00
Bill	02/10/2023	3606	Attorney R. L. Wilson	WR Generator Project	3,143.95
Bill	02/28/2023	5288	Louis T. Rosenberg	Nanostone	4,227.50
Bill	02/28/2023	5290	Louis T. Rosenberg	SAWS	2,748.50
Bill	02/28/2023		Louis T. Rosenberg	HC Wheeling Agreement	813.50
Bill	02/28/2023	5284	Louis T. Rosenberg	WR Generator	3,251.06
Bill	02/28/2023	3630	Attorney R. L. Wilson	HC Pall Agreement	2,895.00
Bill	02/28/2023	3631	Attorney R. L. Wilson	LD Nanostone	3,028.42
Bill	03/31/2023	5355	Louis T. Rosenberg	Crystal Clear/CRWA Agreement	549.00
Bill	03/31/2023	5360	Louis T. Rosenberg	Wheeling Agreement	448.00
Bill	03/31/2023	5362	Louis T. Rosenberg	Nanostone	1,241.50
Bill	03/31/2023	5365	Louis T. Rosenberg	SAWS	1,124.50
Bill	03/31/2023	5364	Louis T. Rosenberg	Retail Service Issues	1,640.00
Bill	03/31/2023	3648	Attorney R. L. Wilson	Nanostone	825.00
Bill	03/31/2023	3647	Attorney R. L. Wilson	Pall Trailer	405.00
Bill	04/30/2023	5427	Louis T. Rosenberg	Crystal Clear/CRWA Agreement	334.00
Bill	04/30/2023	5430	Louis T. Rosenberg	Hays Caldwell	2,786.00
Bill	04/30/2023	3666	Attorney R. L. Wilson	HC WTP	825.00
Bill	04/30/2023	3665	Attorney R. L. Wilson	Policy Committee & Contracts	3,150.00
Bill	05/31/2023	5493	Louis T. Rosenberg	HC Wheeling Contract	4,000.00
Bill	05/31/2023	3684	Attorney R. L. Wilson	Hays Caldwell Overages & Co...	7,607.13
Bill	06/30/2023	5559	Louis T. Rosenberg	HC Wheeling Agreements	196.50
Bill	07/31/2023	1791	Bryant Law PC	Hays Caldwell	1,320.00
Bill	07/31/2023	1793	Bryant Law PC	Water Contracts	3,750.00
Total Contracts					70,991.06
Personnel					
Bill	10/31/2022	5005	Louis T. Rosenberg	Personnel Matters	1,114.00
Bill	11/30/2022	5076	Louis T. Rosenberg	Personnel Matters	6,115.00
Bill	12/31/2022	5154	Louis T. Rosenberg	Personnel Matters	778.00
Total Personnel					8,007.00
Committee Matters					
Bill	10/31/2022	5006	Louis T. Rosenberg	Policy & Legislation Committee	5,733.76
Bill	10/31/2022	5002	Louis T. Rosenberg	Construction Committee	1,749.63
Bill	11/30/2022	5072	Louis T. Rosenberg	Construction Committee	385.00
Bill	11/30/2022	5077	Louis T. Rosenberg	Policy & Legislation Committee	7,344.56
Bill	12/31/2022		Louis T. Rosenberg	Construction Committee	380.00
Bill	12/31/2022	5155	Louis T. Rosenberg	Policy & Legislation Committee	3,575.76
Bill	01/31/2023	5216	Louis T. Rosenberg	Policy Committee	7,568.90
Bill	02/28/2023	5283	Louis T. Rosenberg	Construction Committee	1,186.50
Bill	02/28/2023	5289	Louis T. Rosenberg	Policy Committee	6,806.85
Bill	03/31/2023	5356	Louis T. Rosenberg	Construction Committee	812.00
Bill	03/31/2023	5354	Louis T. Rosenberg	Policy Committee	1,508.75
Bill	03/31/2023	5363	Louis T. Rosenberg	Policy Committee	7,654.30
Bill	04/19/2023	461185	Employers Council	Legal Services-Employee Poli...	810.00
Bill	04/30/2023	5432	Louis T. Rosenberg	Policy Committee	3,793.45
Bill	04/30/2023	3665	Attorney R. L. Wilson	Policy Committee & Contracts	4,200.00
Bill	05/31/2023	5494	Louis T. Rosenberg	Policy Committee	3,822.90
Bill	05/31/2023	5492	Louis T. Rosenberg	General Matters	4,725.50
Bill	06/30/2023	5557	Louis T. Rosenberg	Construction Committee	330.00

CANYON REGIONAL WATER AUTHORITY
Legal Fees by Category
October 2022 through July 2023

Type	Date	Num	Name	Memo	Amount
Bill	06/30/2023	5561	Louis T. Rosenberg	Policy Committee	5,097.95
Bill	07/31/2023	1792	Bryant Law PC	RE: Louis Rosenberg	3,974.90
Total Committee Matters					71,460.71
Wells Ranch					
Bill	12/31/2022	5151	Louis T. Rosenberg	WR Generators	3,980.00
Bill	12/31/2022	5157	Louis T. Rosenberg	Wells Ranch Phase II	1,155.00
Bill	12/31/2022	3588	Attorney R. L. Wilson	September-December 2022	5,282.25
Bill	01/31/2023	5212	Louis T. Rosenberg	WR Generator Contract	3,777.50
Bill	02/28/2023	3632	Attorney R. L. Wilson	WR Generator Project	3,647.11
Bill	03/31/2023	5357	Louis T. Rosenberg	WR Generator Project	1,619.50
Bill	03/31/2023	3649	Attorney R. L. Wilson	WR Generator Project	2,925.00
Bill	04/30/2023	5434	Louis T. Rosenberg	GCUWCD Export Fee	251.50
Bill	04/30/2023	5433	Louis T. Rosenberg	Wells Ranch III	334.00
Bill	04/30/2023	5428	Louis T. Rosenberg	Shannon-Monk	821.00
Bill	04/30/2023	3667	Attorney R. L. Wilson	Wells Ranch	5,720.88
Bill	05/31/2023	5491	Louis T. Rosenberg	Shannon-Monk	82.50
Bill	05/31/2023	3685	Attorney R. L. Wilson	Wells Ranch	4,455.00
Total Wells Ranch					34,051.24
General					
Bill	10/31/2022	5001	Louis T. Rosenberg	Bolton Road Meter Station	179.50
Bill	10/31/2022	5003	Louis T. Rosenberg	General Matters	5,794.63
Bill	11/30/2022	5073	Louis T. Rosenberg	General Matters	6,266.13
Bill	12/31/2022	5152	Louis T. Rosenberg	General Matters	1,188.00
Bill	12/31/2022	3586	Attorney R. L. Wilson	September-December 2022	20,899.50
Bill	01/31/2023	5213	Louis T. Rosenberg	General Matters	2,007.95
Bill	02/10/2023	3604	Attorney R. L. Wilson	General Matters	6,590.00
Bill	02/28/2023	5285	Louis T. Rosenberg	General Matters	4,807.45
Bill	02/28/2023	3629	Attorney R. L. Wilson	General Matters	6,645.00
Bill	03/31/2023	5358	Louis T. Rosenberg	Funding Opportunities	475.50
Bill	03/31/2023	5359	Louis T. Rosenberg	General Matters	5,535.95
Bill	03/31/2023	3646	Attorney R. L. Wilson	General Matters-Policies	7,995.00
Bill	04/30/2023	5429	Louis T. Rosenberg	General Matters	3,515.45
Bill	04/30/2023	3665	Attorney R. L. Wilson	Policy Committee & Contracts	2,280.00
Bill	05/31/2023	3683	Attorney R. L. Wilson	General Matters	2,775.00
Bill	06/30/2023	5558	Louis T. Rosenberg	General Matters	3,358.40
Bill	07/31/2023	1790	Bryant Law PC	RE: Louis Rosenberg	3,863.45
Total General					84,176.91
Water Rights					
Bill	11/30/2022	5074	Louis T. Rosenberg	HC Contract Water Rights Iss...	2,089.50
Bill	12/31/2022	5153	Louis T. Rosenberg	HC Water Rights Issues	3,003.00
Total Water Rights					5,092.50
Legislation					
Check	10/28/2022	35928	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Check	12/02/2022	36024	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Check	12/22/2022	36113	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Bill	01/31/2023	5215	Louis T. Rosenberg	Legislation	632.50
Check	02/03/2023	36315	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Bill	02/28/2023	5287	Louis T. Rosenberg	Legislation	1,605.00
Check	03/03/2023	36416	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Check	03/29/2023	36511	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Bill	03/31/2023	5361	Louis T. Rosenberg	Legislation	2,356.00
Check	04/28/2023	36618	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Bill	04/30/2023	5431	Louis T. Rosenberg	Legislation	4,043.50
Check	05/26/2023	36716	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Check	06/30/2023	36824	Charles C. Bailey	Monthly Governmental Consul...	2,000.00

CANYON REGIONAL WATER AUTHORITY
Legal Fees by Category
October 2022 through July 2023

Type	Date	Num	Name	Memo	Amount
Bill	06/30/2023	5560	Louis T. Rosenberg	Legislation	156.00
Check	07/28/2023	37004	Charles C. Bailey	Monthly Governmental Consul...	2,000.00
Total Legislation					28,793.00
Total Legal & professional fees					302,572.42
Total Other Charges					302,572.42
TOTAL					302,572.42

Wells Ranch Project - Phase II
Bond Series 2015
Budget vs. Actual
July 31, 2023

		TOTAL	TOTAL	%
		BUDGET	DISBURSEMENTS	Complete
	Wells Ranch Series 2015 Bond Proceeds	42,000,000.00	42,000,000.00	100.00%
	Bond Issue Costs	420,840.00	420,840.00	100.00%
	Capitalized Interest	1,664,000.00	1,664,000.00	100.00%
	Beginning Cash Available for Project	39,915,160.00	39,915,160.00	100.00%
	Preliminary Engineering Report	25,000.00	25,000.00	100.00%
	Environmental Services	54,080.82	54,080.82	100.00%
	Engineering Add'l Services (RCE Inspections)	317,067.50	317,067.50	100.00%
	Inspection Services (HOT)	37,510.00	37,510.00	100.00%
	SCADA Engineering Services	50,000.00	50,000.00	100.00%
	Legal Notices	22,940.45	22,940.45	100.00%
	Prof Services-TWDB Assistance	15,887.86	15,887.86	100.00%
	Santa Clara Road TM	4,545,112.65	4,545,112.65	100.00%
	Crystal Clear TM	3,102,090.36	3,102,090.36	100.00%
	Wagner Booster Station Expansion	4,472,598.27	4,472,598.25	100.00%
	Wells Ranch Plant Improvements	7,678,408.73	7,678,407.73	100.00%
	Leissner Booster Station Imp.			
	Legal Fees	110,925.31	110,925.31	100.00%
	Basic Engineering Services	227,160.00	227,160.00	100.00%
	Engineering Add'l Services	50,078.25	48,272.75	96.39%
	Construction Costs - 2 MG Tank (Preload)	1,533,365.90	1,533,365.90	100.00%
	Construction Costs - Facility (Payton)	1,185,478.00	1,185,478.00	100.00%
	SCADA	16,000.00	16,000.00	100.00%
	Total Leissner Booster Stn Expansion	3,123,007.46	3,121,201.96	99.94%
	Oak Tree Elevated Storage Tank	2,778,256.00	2,778,256.02	100.00%
	Well Field (7 wells)	10,812,545.17	10,812,544.67	100.00%
	Generator Installation Project			
	Legal, Consultant Fees	55,240.83	55,240.83	100.00%
	Legal Notices	5,864.16	5,864.16	100.00%
	Basic Engineering Services	203,320.00	172,822.00	85.00%
	Engineering Add'l Services	9,000.00	9,000.00	100.00%
	Deadman Well Site			
	Generator Cost	71,265.00	54,522.00	76.51%
	Generator Installation	205,000.00	181,827.00	88.70%
	Total Deadman Well Site	276,265.00	236,349.00	85.55%
	Deer Stand Well Site			
	Generator Cost	71,265.00	54,522.00	76.51%
	Generator Installation	205,000.00	181,826.60	88.70%
	Total Deer Stand Well Site	276,265.00	236,348.60	85.55%
	Wells Ranch WTP Site			
	Generator Cost-WTP	317,295.00	242,748.90	76.51%
	Generator Cost-MCC-2	279,140.00	213,559.37	76.51%
	Generator Installation-WTP	414,350.00	368,178.12	88.86%
	Generator Installation-MCC-2	378,140.00	337,062.06	89.14%
	Total Wells Ranch WTP Site	1,388,925.00	1,161,548.45	83.63%
	Leissner BPS Site			
	Generator Cost	212,200.00	162,343.80	76.51%
	Generator Installation	342,000.00	302,473.26	88.44%
	Total Leissner BPS Site	554,200.00	464,817.06	83.87%
	Wagner Booster Station			
	Generator Cost	212,200.00	162,343.80	76.51%
	Generator Installation	263,000.00	232,034.40	88.23%
	Total Wagner Booster Station	475,200.00	394,378.20	82.99%
	Well #5 & Well #13 Generator Cost	71,710.00	54,862.65	76.51%
	Mobilization, Bonds & Insurance	119,000.00	96,390.00	81.00%
	Total Generator Installation Project	3,434,989.99	2,887,620.95	84.06%
	Total Phase II - 2015	40,469,495.26	39,920,319.22	98.64%
	Unallocated Contingency	-554,335.26		
	Total Expenditures		39,920,319.22	
	Interest Income	431,899.13	438,079.29	
	Cash from General Funds	58,146.57	58,146.57	
	Cash from General Funds	64,289.56	0.00	
	Ending Cash	0.00	491,066.64	

9:37 AM

08/28/23

Accrual Basis

Wells Ranch Phase II - 2015
Account Activity
As of July 31, 2023

Type	Date	Num	Name	Memo	Split	Amount	Balance
BOKF, NA, Austin - Escrow							123,957.01
Deposit	07/03/2023			Interest	Interest Income...	463.64	124,420.65
Total BOKF, NA, Austin - Escrow						463.64	124,420.65
Logic-Construction Acct							365,003.87
Deposit	07/31/2023			Interest	Interest Income...	1,642.12	366,645.99
Total Logic-Construction Acct						1,642.12	366,645.99
TOTAL						2,105.76	491,066.64

Hays Caldwell WTP Improvements
Budget vs. Actual
July 31, 2023

	TOTAL	TOTAL	
	BUDGET	DISBURSEMENTS	%
Hays Caldwell Series 2017 Bond Net Proceeds	4,801,596.00	4,801,596.00	100.00%
Hays Caldwell Series 2021 Bond Net Proceeds	12,355,000.00	12,355,000.00	100.00%
City of San Marcos Cash Contribution	511,593.00	511,593.00	100.00%
City of San Marcos Cash Contribution	4,634,982.00	4,634,982.00	100.00%
Beginning Cash Available for Project	22,303,171.00	22,303,171.00	100.00%
Land Purchase - 2.009 Acres	555,628.44	555,628.44	100.00%
TWDB D-Fund Application Services	35,700.00	35,700.00	100.00%
HMGP Application	12,000.00	12,000.00	100.00%
Basic Engineering Services:			
Preliminary Phase	403,700.00	403,700.00	100.00%
Design Phase	728,400.00	728,400.00	100.00%
Bid Phase	73,900.00		0.00%
Construction Phase	458,800.00		0.00%
Total Basic Engineering Services	1,664,800.00	1,132,100.00	68.00%
Additional Engineering Services:			
Environmental Review & Permitting	121,200.00	107,838.80	88.98%
Topographic Survey	36,900.00	32,950.00	89.30%
Warranty Phase	30,900.00		0.00%
Start-Up Services	59,000.00		0.00%
O&M Manual Update	16,900.00		0.00%
Water Treatment Plant Audit	0.00		0.00%
Flood Protection	0.00		0.00%
CT Study & TCEQ Update	17,000.00	16,954.00	99.73%
Constr Observation & Resident	174,000.00		0.00%
Geotechnical Investigation	76,200.00	76,186.25	99.98%
TWDB & TCEQ Coordination	102,500.00	102,617.49	100.11%
Power System Study	55,000.00	55,000.00	100.00%
City of San Marcos Permitting	104,200.00	104,270.89	100.07%
City of San Marcos Platting	28,900.00	29,911.00	103.50%
Ozone Bldg Upgrade to CMU	49,800.00	46,813.60	94.00%
TCEQ Pilot Study	4,000.00		0.00%
Preconstruction T&E Surveys-Terrestrial	2,600.00		0.00%
Preconstruction T&E Surveys-Mussels	8,500.00		0.00%
Dewatering Aquatic Resources	27,600.00		0.00%
Geotechnical Baseline for River Intake	4,800.00	4,782.50	99.64%
Cultural Resources Constr Monitoring	42,500.00		0.00%
OSSF Irrigation Reconfig & Permitting	9,000.00		0.00%
Total Additional Engineering Services	971,500.00	577,324.53	59.43%
HCWTP Ozone Deman & Decay Testing	9,992.00	9,992.00	100.00%
City of San Marcos-Permits	4,229.74	4,229.74	100.00%
SCADA			
Design Fees	20,000.00	3,963.75	19.82%
Construction Costs	150,000.00		0.00%
Total SCADA Costs	170,000.00	3,963.75	2.33%
Bluebonnet Electric Coop - Service Entrances	0.00	0.00	0.00%

Hays Caldwell WTP Improvements
Budget vs. Actual
July 31, 2023

		TOTAL	TOTAL	
		BUDGET	DISBURSEMENTS	%
Probable Construction Costs				
	Raw Water Pump Station & Intake	1,581,000.00		0.00%
	Yard Piping	1,630,000.00		0.00%
	Clarifier Upgrades	1,173,000.00		0.00%
	Splitter Box	479,000.00		0.00%
	Chemical Feed & Storage	232,000.00		0.00%
	Ozone Improvements	2,005,000.00		0.00%
	New 1 MG GST & Rehab Existing 1 MG Tank	1,938,000.00		0.00%
	HSPS Improvements	288,000.00		0.00%
	Recycle Pump Station	128,000.00		0.00%
	Decant Pump Station	97,000.00		0.00%
	Decant Ponds	875,000.00		0.00%
	Site Civil Paving, etc.	563,000.00		0.00%
	Electrical Improvement	2,951,000.00		0.00%
	HVAC Improvement	260,000.00		0.00%
	Instrumentations & Controls	953,000.00		0.00%
	Subtotal	15,153,000.00	0.00	0.00%
	Contractors' Overhead & Profit - 15%	2,272,950.00		0.00%
	Bond & Insurance - 2%	303,060.00		0.00%
	Permits - 1.5%	228,040.00		0.00%
	Contingency - 15%	2,272,950.00		0.00%
	Base Bid Total Cost	20,230,000.00	0.00	0.00%
	Additive Alternative I	422,000.00		0.00%
	Additive Alternative II	602,000.00		0.00%
	Additive Alternative III	30,000.00		0.00%
	Additive Alternative IV	20,000.00		0.00%
	Additive Alternative V	45,000.00		0.00%
	Total Probable Construction Costs	21,349,000.00	0.00	0.00%
	Total Hays Caldwell WTP Improvements	24,772,850.18	2,330,938.46	9.41%
	Unallocated Contingency	-2,469,679.18		0.00%
	Total Expenditures		2,330,938.46	
	Interest Income		1,068,836.66	
	Ending Cash		21,041,069.20	

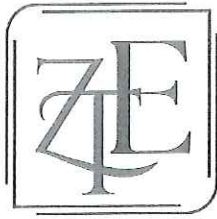
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08/28/23

Accrual Basis

Hays Caldwell WTP Improvements
Banking Activity
As of July 31, 2023

Type	Date	Num	Name	Memo	Amount	Balance
Logic, Construction Acct						16,857,423.99
Deposit	07/31/2023			Interest	75,839.64	16,933,263.63
Total Logic, Construction Acct					75,839.64	16,933,263.63
BOKF, NA						4,092,275.69
Deposit	07/03/2023			Interest	15,529.88	4,107,805.57
Total BOKF, NA					15,529.88	4,107,805.57
TOTAL					91,369.52	21,041,069.20



LAW OFFICE OF
ZACHARIAH T. EVANS

August 9, 2023

Trey Wilson, Esq.
R.L. Wilson Law Firm
16607 Blanco Road, Suite 501
San Antonio, Texas 78232
Via email: trey@sa-law.com

Re: Water Transportation and Wheeling Agreement ("Agreement") between Maxwell Special Utility District ("Maxwell") and Canyon Regional Water Authority ("CRWA"), Effective January 8, 2001

Dear Mr. Wilson:

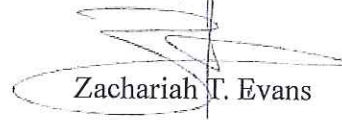
This correspondence serves as notice to CRWA that Maxwell is exercising rights provided under Section 3.02 of the above-referenced Agreement. Specifically, Maxwell is (i) exercising its "right of exclusive use of the excess capacity within the Existing Transmission Lines, with said exclusive use to commence one year from the date" (*i.e.*, August 9, 2023,) of Maxwell's determination to exercise this right; and (ii) commencing in six (6) months of the date of this correspondence, "Maxwell's intention to utilize the full capacity of the Existing Transmission Lines."

In the interest of forgoing unnecessary delays in this matter, Maxwell also informs CRWA that Maxwell has no interest in any "right to participate in up-sizing [] of an additional transmission line," as also provided under Section 3.02.

By way of continued correspondence, Maxwell is also notifying County Line Special Utility District ("County Line") and Martindale Water Supply Corporation ("Martindale") of Maxwell's decision. Maxwell appreciates and understands County Line's and Martindale's commitments and obligations to provide their customers with continuous and adequate service. To that end, Maxwell will continue to work in good faith with County Line and Martindale to identify current and future sources of additional water supply. However, Maxwell will no longer allow CRWA to operate outside the boundaries of the Agreement (or any others), especially by over-committing Maxwell's water capacity rights.

As always, I thank you for your time and attention. Please contact me directly if you wish to discuss this matter.

Sincerely,



Zachariah T. Evans

cc: Maxwell Board of Directors

Mr. Justin Ivicic
gm@maxwellsud.com

Mr. Humberto Ramos
humberto@clsud.org

Mr. Steven Fonville
martwsc@austin.rr.com

Mr. John Kaufman
jkaufman@crwa.com

Michael A. Gershon, Esq.
mgershon@lglawfirm.com

John Hohn, Esq.
jyhohn@centurytel.net

August 31, 2023

Mr. Timothy D. Fousse, Board President
Mr. Brandon Rohan, Board Vice President
Members, Board of Trustees
Mr. John Kaufman, General Manager
Canyon Regional Water Authority
850 Lakeside Pass
New Braunfels, Texas 78130

**Re: Formal Request for CRWA's (1) Completion of Waterline and
(2) Delivery of Contracted-For Water to County Line SUD**

Dear Mr. Fousse, Mr. Rohan, Trustees, and Mr. Kaufman:

This request is time sensitive. It will require immediate discussion and action by CRWA's Board of Trustees. Current retail customer water demand and foreseeable, imminent increased demand have made it imperative that our client County Line Special Utility District ("County Line SUD") take immediate action to ensure uninterrupted retail water supply within its service area. In addition to rapid development and increasing water demand over the past decade, several circumstances have quickly evolved during 2023, primarily:

- (i) several developer commitments to pay for build-out and retail water service to 3,100+ new LUEs (living-unit equivalents); and
- (ii) Maxwell Special Utility District's August 9, 2023 six-month notice of intent to utilize the full capacity of Existing Transmission lines under Section 3.02 of the Water Transportation and Wheeling Agreement between Maxwell SUD and CRWA.

County Line SUD has for more than two decades met its commitment on the bond issuances that financed infrastructure that primarily benefited its other CRWA Hays-Caldwell member partners, with the expectation that a subsequent effort would be undertaken to complete the infrastructure contemplated to bring water to County Line SUD, Martindale WSC, and Maxwell SUD (including what has been referred to in recent Board packets as the HCWTP Improvements Project). Each month County Line SUD remits to CRWA a payment of about \$171,500 that includes its bond payments, a membrane fund payment, a line and use delivery charge, a raw water charge and an

administrative fee based on the contracted-for amount of 1,308 acre feet, much of which CRWA cannot deliver to County Line SUD. Time is now of the essence to launch the effort to bring the entire contracted-for volume of water to County Line SUD and its other Hays-Caldwell partners.

We are encouraged that the wheels are in motion by the Board of Trustees' following approvals of engineering services at its August 14, 2023 meeting:

- (i) Gallegos Engineering to conduct alignment determination and related services on a transmission line to County Line SUD's point of delivery; and
- (ii) Ardurra Group to provide grant application services in support of the HCWTP Improvements Project.

We understand that there was a meeting over the past several days with Ardurra Group on a multi-task scope of work for membrane and other HCWTP and infrastructure improvements that would ultimately enable delivery of treated water to County Line SUD.

Although we are encouraged by these efforts, we remain very concerned that CRWA is not moving quickly enough to ensure that water comes on-line soon enough. As you know, in part to mitigate CRWA's inability to deliver County Line SUD's full contractual commitment now or in the immediate future, we entered a two-year contract for short-term water from the City of San Marcos that requires the expenditure of more than \$4.6 million for infrastructure, right of way, and raw water to be paid at the rate of \$5.82 per 1,000 gallons received with a 5% annual increase in this rate. On a related note, we look forward to continued discussions with CRWA, Crystal Clear SUD and our other member partners about equitable pricing for the water committed to Hays-Caldwell partners that CRWA cannot deliver. We will provide feedback on the draft memorandum of understanding intended to address this topic, which we received from Trey Wilson by email late yesterday afternoon.

On August 21, 2023, County Line SUD's Board of Directors was extensively briefed by its senior management, engineers and legal counsel on the implications of Maxwell SUD's notice, its arrangement with the City of San Marcos, the status of new retail customers coming on-line, and the above-referenced developments at CRWA. At this meeting our Board took formal action (1) directing our law firm to prepare and send this letter and (2) delegating authority to two Directors and the General Manager to monitor CRWA's response and to direct our firm to pursue all legal remedies under our CRWA agreements to secure CRWA's completion of the necessary infrastructure to deliver the entire contracted-for water supply to County Line SUD.

Formal Request for Completion of Waterline and
Delivery of Contracted-For Water
August 31, 2023
Page 3

There are bond-related implications to the current predicament. At the present time County Line SUD's leadership remains hopeful that CRWA and our member partners at CRWA will work closely and diligently to prioritize the obvious action items and accelerate the necessary timelines to move forward with the Hays-Caldwell improvements. Our Board will expect an update at its September 18th meeting. But please recognize the Board's action in August to take all necessary legal action to protect County Line SUD's ability to serve its retail customers.

We look forward to (i) immediate informal discussion and (ii) formal review and action by the Board of Trustees at its September 2023 meeting to accelerate timelines and commit to achievable completion of the HCWTP Improvements Project and related waterline buildout to deliver the entire contracted-for water to County Line SUD, particularly in light Maxwell SUD's own water-supply and infrastructure stresses and notice to terminate County Line SUD's capacity by February 2024.

Sincerely,



Michael A. Gershon

cc: Mr. R.L. "Trey" Wilson, General Counsel
Canyon Regional Water Authority

Ms. Toni Brewer
Ms. Teresa "Tracy" Scheel
Mr. Humberto Ramos
Mr. Daniel Heideman
Mr. Doug Schnautz
Mr. Chris Betz
County Line Special Utility District

Mr. Jose de la Fuente, Litigation Practice Group Chair
Lloyd Gosselink Rochelle & Townsend, P.C.

MEMORANDUM

To: CRWA Board of Trustees

From: John M. Kaufman, General Manager

Date: September 11, 2023

Subject: CRWA Staff Report

Drought Report (refer to inclusions)

- A. Current Drought Conditions:
 - a. Continental US drought conditions
 - b. State of Texas drought conditions
 - c. Guadalupe County drought conditions
- B. Precipitation Report through August 31, 2023
- C. Canyon Lake Current Conditions:
 - a. Historical chart
 - b. Current lake level
 - c. 2009 vs. 2023 comparison

Water Treatment, Storage, and Transmission Operations

- A. Wells Ranch WTP:
 - a. Raw water production – recent high was 12.19 MGD.
 - b. TCEQ inspection – Corrections to minor deficiencies were completed.
 - c. Wells:
 - ♦ Well No. 1 Rehabilitation – The vertical turbine pump column was pulled and inspected for damage that should be covered by warranty.
- B. Lake Dunlap WTP:
 - a. Raw water production – recent high was 14.28 MGD.
 - b. Engineering SOQs received for the Lake Dunlap Improvement Project were reviewed by an ad hoc selection committee comprised of CRWA staff members and representatives from Springs Hill, East Central, Crystal Clear, Green Valley, and the City of Cibolo. From the reviews the following four firms were selected for interviews on September 25 at CRWA: STV, Ardurra, Garver, and Black & Veatch.
- C. Hays Caldwell WTP:
 - a. Raw water production – recent high was 3.695 MGD.
 - b. Pall Trailer – currently produces about 1.0 to 1.2 MGD.
 - c. Koch membranes – operating more efficiently and effectively due to use of the Pall Trailer.
- D. Storage and Transmission:

- a. Normal operations.

Water Usage

Water usage tables and graphs from January through August 2023 are attached.

Taste and Odor

In June CRWA staff began noticing taste and odor in the raw and treated water at the Lake Dunlap WTP. Member entities were immediately notified of the problem. Taste and odor issues are associated with the rapid growth of algae in Lake Dunlap due to the ongoing hot weather and nutrient levels in the water. The major source of the taste and odor at Lake Dunlap is 2-Methyl-Isoborneol (MIB).

MIB and geosmin account for the majority of biologically caused taste and odor outbreaks in drinking water. MIB has a distinct earthy or musty odor, which most people can easily smell. The odor detection threshold of MIB is low, ranging from 0.002 to 0.02 micrograms per liter (mg/L) in water. CRWA routinely tests the water from Lake Dunlap for geosmin and MIB. Current concentrations are low with no recent reports of taste and odor.

PFAS Testing

Recent testing of water at the Wells Ranch WTP by TCEQ found no detectable presence of 29 toxic PFAS chemicals.

Recent testing of water at the Lake Dunlap WTP by TCEQ found the presence of 1 out of 29 toxic PFAS chemicals in concentration slightly exceeding the "reporting limit": Perfluoropentanoic acid (PFPeA). The reporting limit is 3.01 ng/L. The measured concentration was 3.71 ng/L. This compound is found in industrial surfactants.

Prior testing of water at the Hays Caldwell WTP by TCEQ found the presence of 2 out of 29 toxic PFAS chemicals in concentrations slightly exceeding the "reporting limit": Perfluoropentanoic acid (PFPeA) and Perfluorobutanesulfonic acid (PFBS).

GBRA

- CRWA staff will attend the first meeting of *Second Party Take Stakeholder* regarding Guadalupe Habitat Conservation Plan (HCP) on September 28 at 10 am.

Region L

The next short-term steps for the planning group are:

- Water availability and supply analysis
- Identification of water needs
- Water management strategies and evaluations

The next meeting will be at SAWS office on November 2nd at 9:30 a.m.

GBC

- The next meeting is October 27 at 10:30 am.

GMA 13

- Next meeting is September 15th.

Guadalupe County Groundwater Conservation District

- Staff will attend the next Board meeting on September 14, 2023, at 4:30 pm.

Gonzales County Underground Water Conservation District. (GCUWCD)

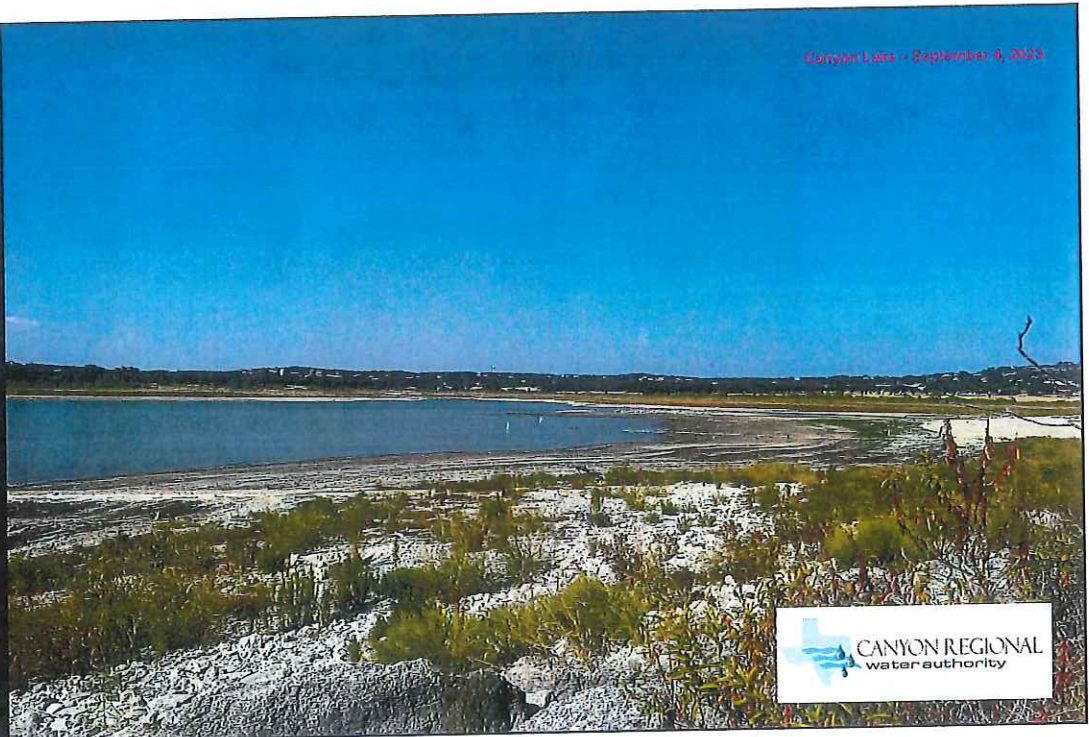
- CRWA's request to amend its permit by 920 acre-feet for Well -14 will be the subject of a public hearing on September 12 at 5 pm.
- GBRA Permit status request: GCUWD is contracting with SOAH for a contested case hearing. The date for hearing has not yet been determined, but location will be in Gonzales TX.

Wells Ranch Phase III

- CRWA held a meeting on August 10th to discuss Wells Ranch III project phasing, financial impact, groundwater leasing and permitting, and next steps.
- An additional item included reviewing the Water Supply Contract to improve and update content and language. Trey Wilson, John Kaufman, and Stephanie Leibe were tasked to perform the contract review and provide comments.

CRWA
Board of Trustees
Drought Report
September 11, 2023

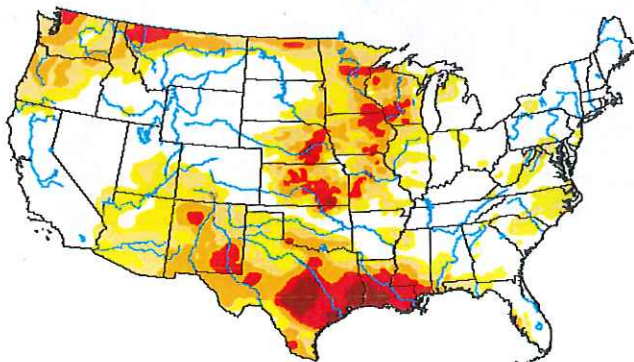
Canyon Lake - September 8, 2023



1

U.S. Drought Monitor
Contiguous U.S. (CONUS)

August 29, 2023
(Released Thursday, Aug. 31, 2023)
Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

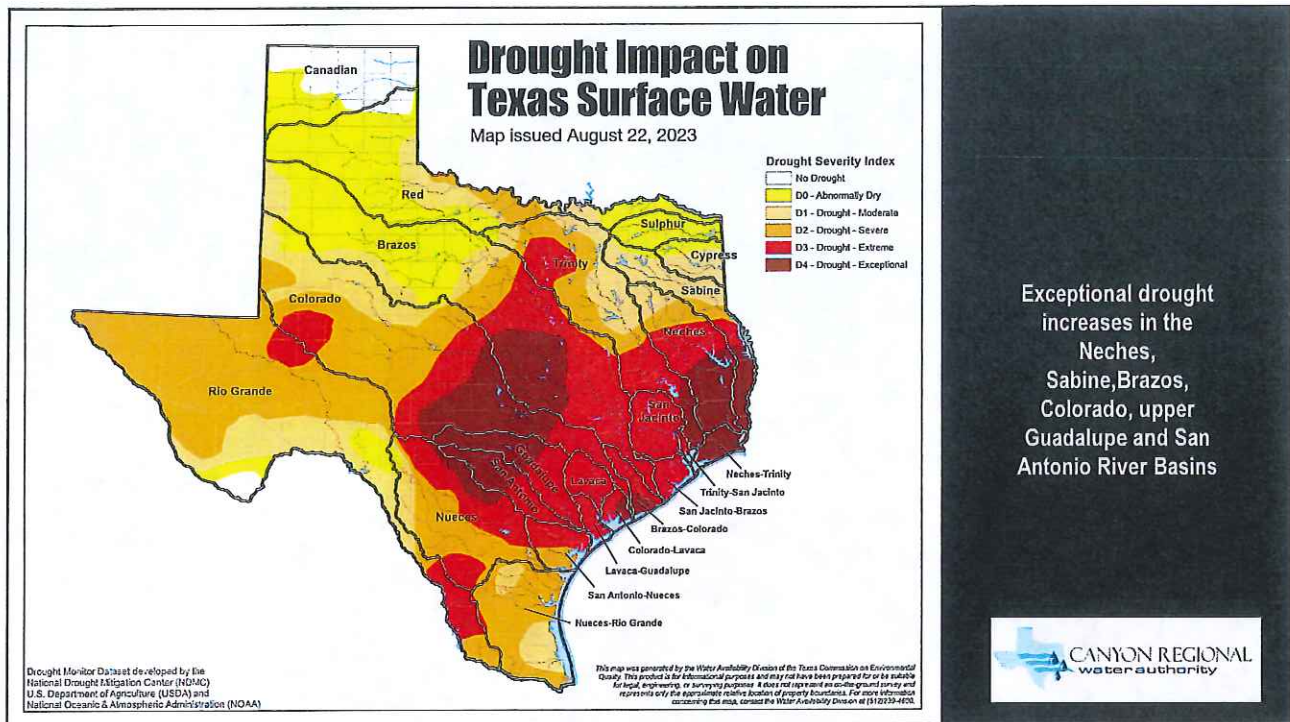
David Simeral
Western Regional Climate Center



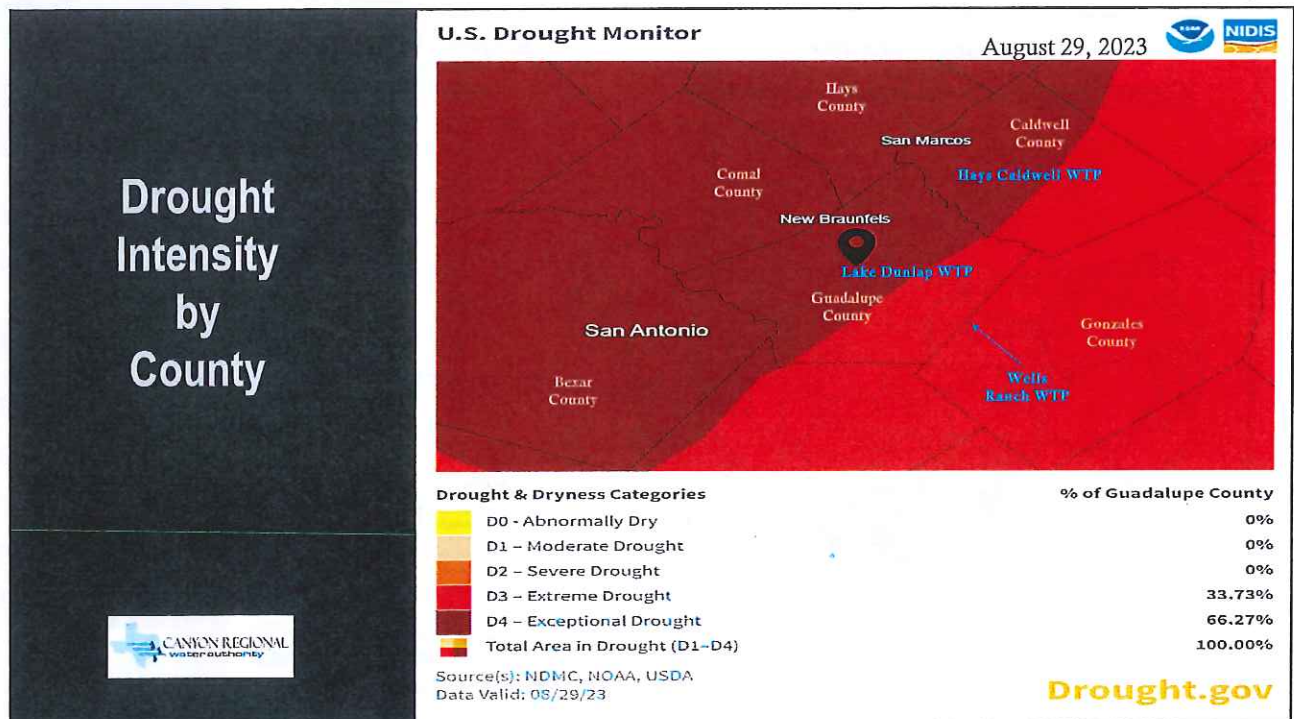
droughtmonitor.unl.edu



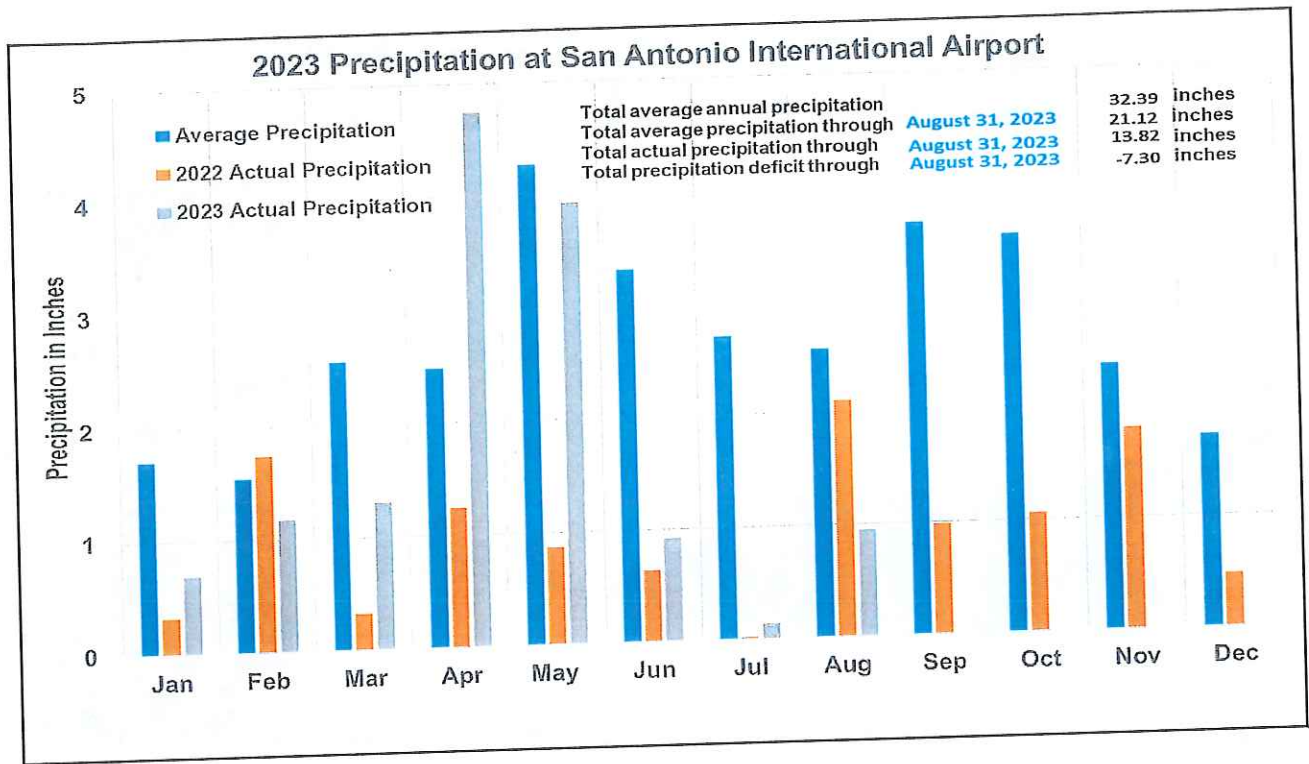
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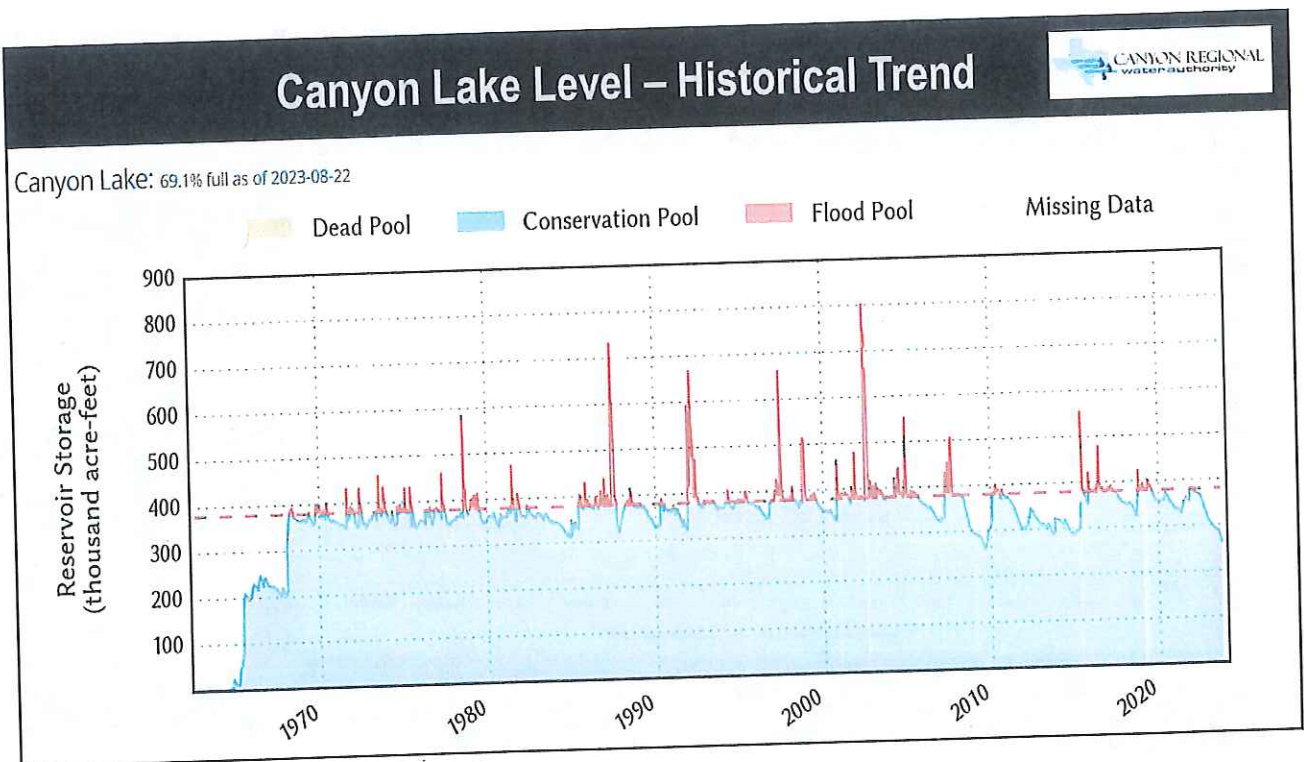
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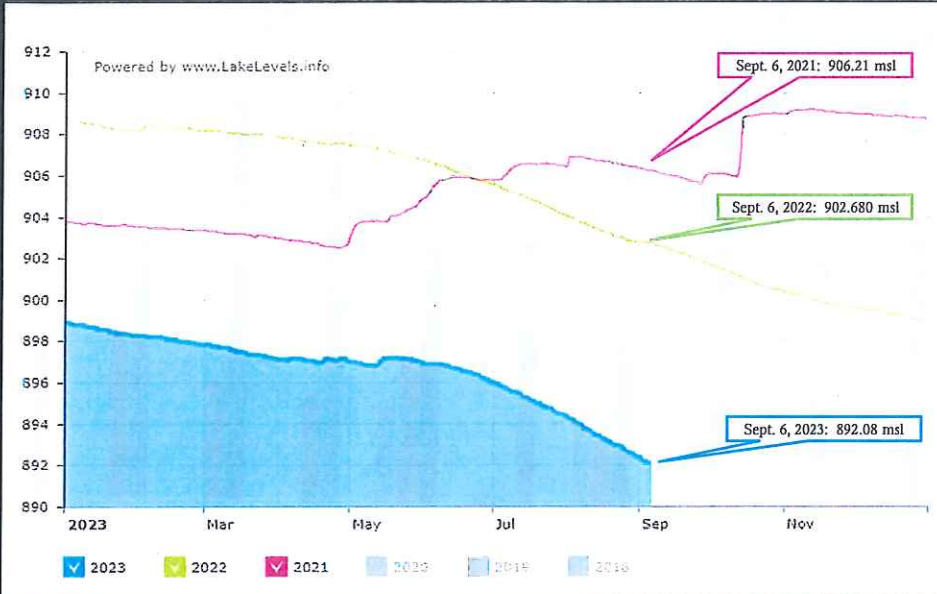


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6

Canyon Lake Water Level Trends



Drought Trigger Levels

Stage 1 (Mild Conditions)

- 895 feet (msl)*

- Action - 5% reduction

Stage 2 (Moderate Conditions)

- 890 feet (msl)

- Action - 10% reduction

Stage 3 (Severe Conditions)

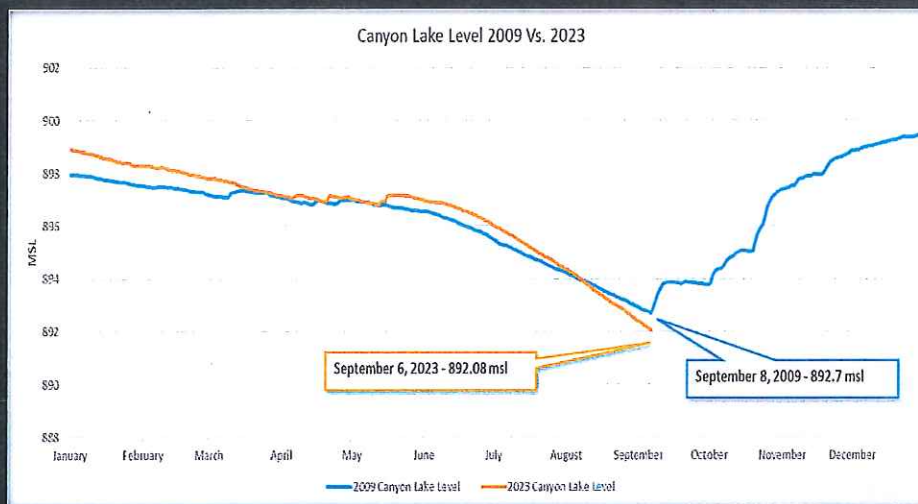
- 885 feet (msl)

- Action - 15% reduction

*Mean Sea Level

7

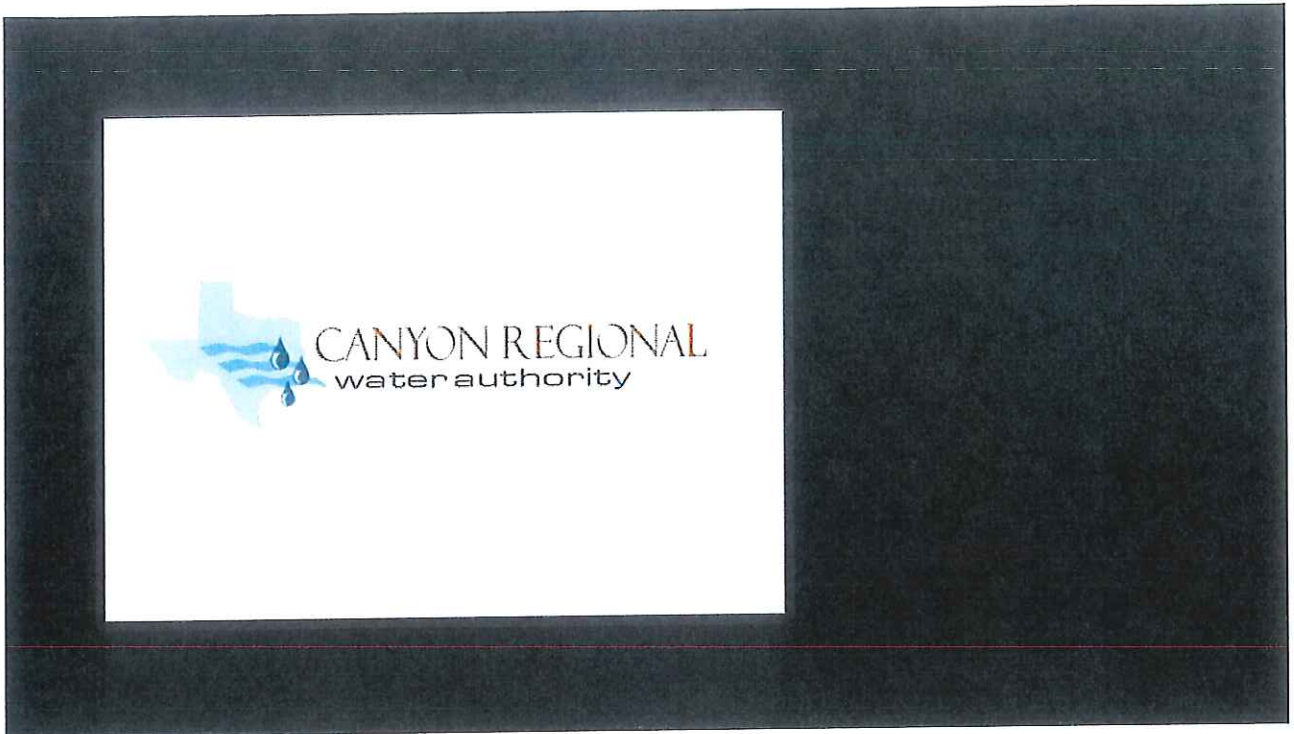
Canyon Lake Level – 2009 Vs. 2023



Stage I - Mild Water Storage

- GBRA Stage I drought condition notification - July 20, 2023
- CRWA Stage I drought condition notification to Entities.
- Stage II trigger level - 890.00 msl. The goal - to achieve a 10% reduction in daily average usage.

8





Lake Dunlap / Wells Ranch
Water Usage Summary

YEAR 2023 (January thru August)			
Lake Dunlap & Wells Ranch Raw Water Inventory		Lake Dunlap & Wells Ranch Contract Amounts	
LD Surface Water		LD Supply Contracts	
Acre-Feet		Acre-Feet	
GBRA Leased Raw Water		SAWS	
10,575.00		City of Cibolo	
CRWA Water Rights/Raw Water		East Central SUD	
564.50		Green Valley SUD	
Crystal Clear/GBRA Leased Water ¹		City of Marion	
500.00		Crystal Clear SUD	
Annual Total		Springs Hill WSC	
11,639.50		Annual Total	
WR Ground Water		10,980.00	
Acre-Feet			
Guadalupe Carrizo Leased			
2,603.42			
Guadalupe Wilcox Leased			
3,026.00			
Gonzales Carrizo Leased			
7,400.00			
Annual Total			
13,029.42			
LD & WR Combined Annual Raw Water Inventory		Wells Ranch Phase I & II Combined Contract Amounts	
Acre-Feet		Acre-Feet	
Lake Dunlap WTP		SAWS ²	
11,639.50		City of Cibolo ³	
Wells Ranch WTP		East Central SUD	
13,029.42		Green Valley SUD	
2023 Annual Total		City of Marion	
24,668.92		Crystal Clear SUD ³	
		Springs Hill WSC ²	
		City of Converse	
		Annual Total	
		13,029.00	
		LD & WR Annual Contract Amount	
		24,009.00	

Comments:

¹ Crystal Clear Leases 500.00 acre-feet from GBRA. CRWA reports these diversions to the Water Master.

² Springs Hill leases 500.00 acre-feet of Dunlap water from SAWS. This contract is due to expire December 31, 2023.

³ Cibolo leases 741.00 acre-feet of Wells Ranch water from Crystal Clear. This contract is due to expire December 31, 2023.



Lake Dunlap / Wells Ranch Water Usage Summary

CRWA Entities - LD & WR Total Contract Amounts 2023		Comments: The total contract amounts for each entity is current and includes leased water between utilities. These contract amounts may change January 1, 2024. All meter readings in this table are from CRWA's SCADA system.
Entity	Acre-Feet	
SAWS	6,300.00	
City of Cibolo	3,951.93	
East Central SUD	2,400.00	
Green Valley SUD	7,455.68	
City of Marion	300.00	
Crystal Clear SUD	551.39	
Springs Hill WSD	2,550.00	
City of Converse	500.00	
Total		24,009.00

2023 (January thru August) Lake Dunlap/Wells Ranch Use		
	% Use	% Available
	52%	48%

Acre-feet
Not to Scale

Entity	Purchased	Available	Total
GBRA	6,124.31	4,450.69	10,575.00
Dunlap WTP Rights	354.50	210.00	564.50
Guadalupe Carrizo	1,110.41	1,493.00	2,603.41
Guadalupe Wilcox	1,107.73	1,918.27	3,026.00
Gonzales Carrizo	3,647.56	3,752.44	7,400.00
Crystal Clear/GBRA	456.83	43.17	500.00

■ Purchased ■ Available



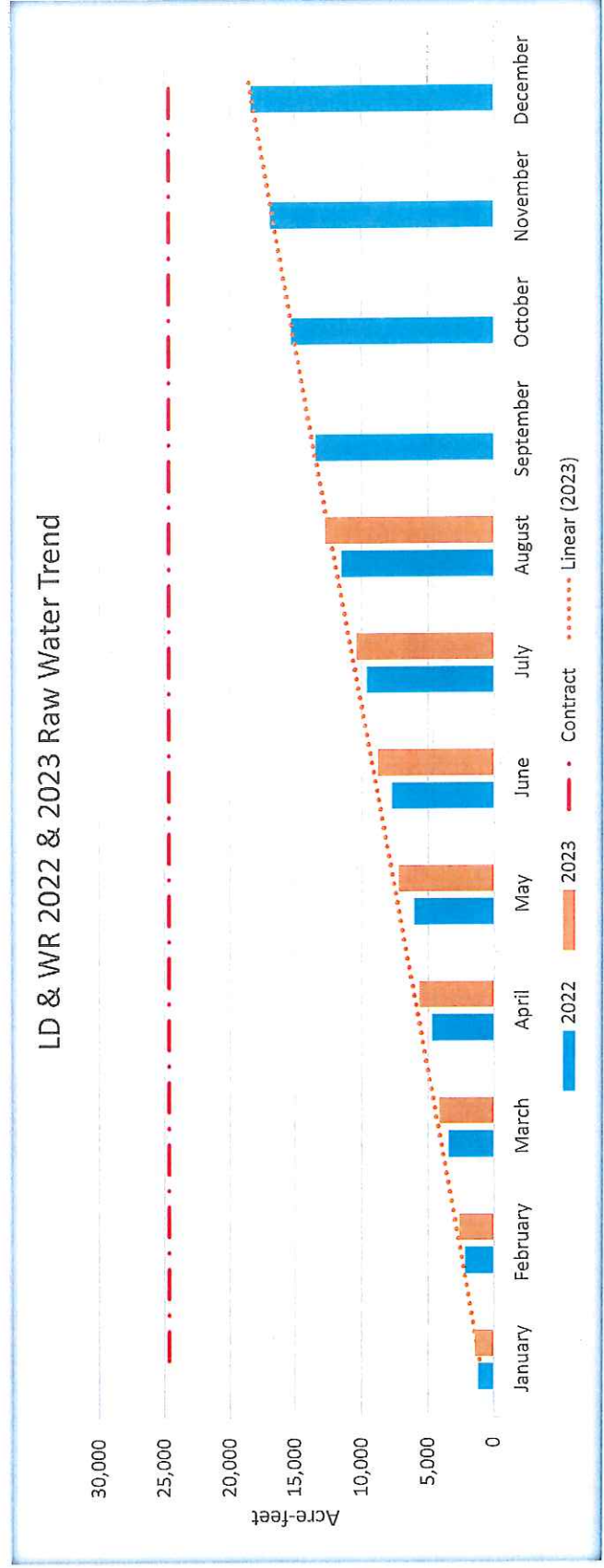
Lake Dunlap / Wells Ranch Water Usage Summary

Entity Use Lake Dunlap & Wells Ranch Combined						
Entity	Plant Contract Acre-Feet	YTD Use Acre-Feet	YTD Available Acre-Feet	Contract % Use		
SAWS	6,300.00	3,609.05	2,690.95	57%		
City of Cibolo	3,951.93	1,565.15	2,386.78	40%		
East Central SUD	2,400.00	1,486.45	913.55	62%		
Green Valley SUD	7,455.68	3,485.27	3,970.41	47%		
City of Marion	300.00	24.66	275.34	8%		
Crystal Clear SUD	551.39	458.83	92.56	83%		
Springs Hill WSC	2,550.00	1,404.09	1,145.91	55%		
City of Converse	500.00	238.62	261.38	48%		
Total	24,009.00	12,272.12	11,736.88	51%		

LD & WR Contracts Percentage Use

% Use % Available

51% 49%





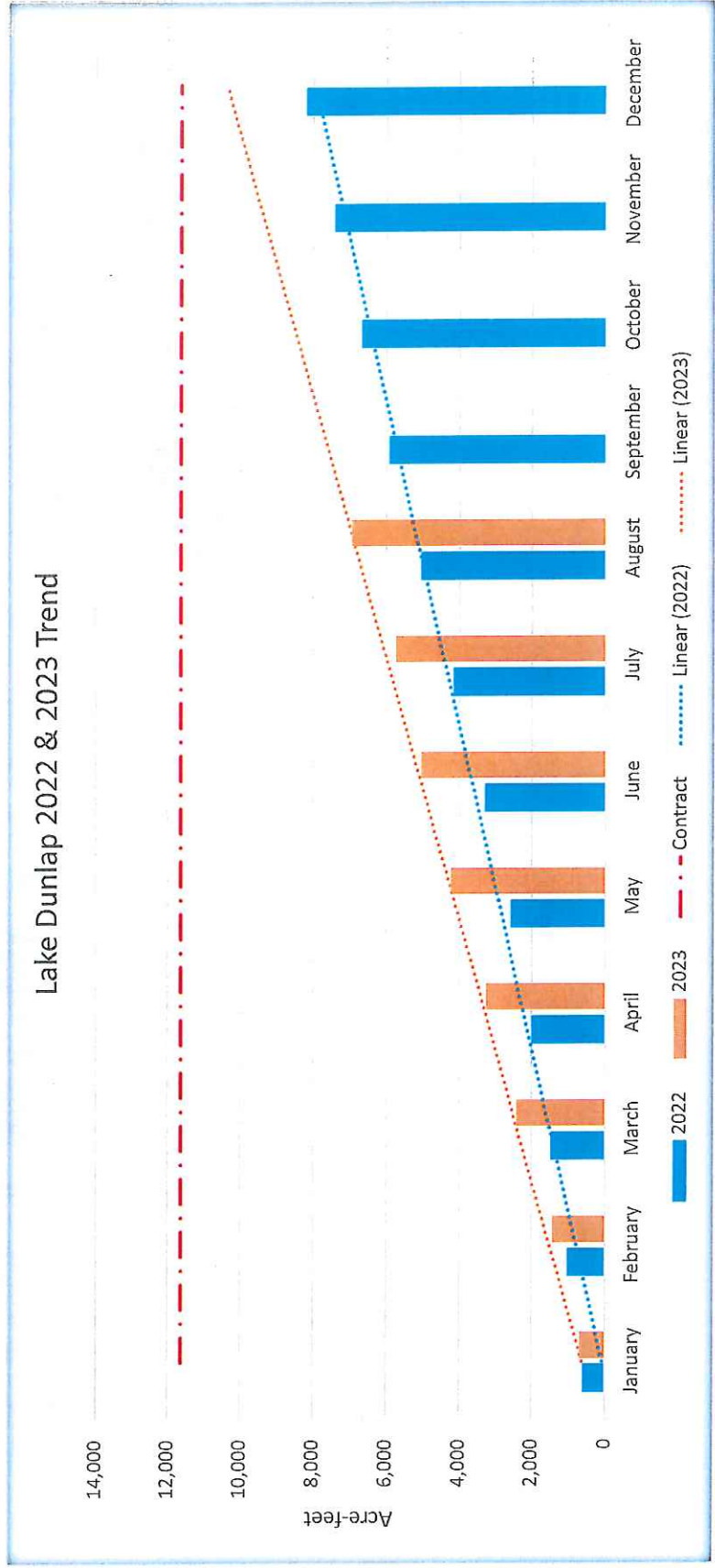
**Lake Dunlap / Wells Ranch
Water Usage Summary**

2023 (January thru August) Lake Dunlap WTP Raw Water Usage By Right				
	Annual Allocation		YTD Use	
	Acre-feet		Acre-feet	Available Acre-feet
GBRA	10,575.00		6,124.31	4,450.69
River Mill #18-3829	400.00		190.00	210.00
Ray Dittmar #18-3832A	44.00		44.00	0.00
Gary Dittmar #18-3833B	30.50		30.50	0.00
William Daniel #18-3834	71.48		71.48	0.00
William Daniel #18-3834A	18.52		18.52	0.00
Crystal Clear GBRA Lease	500.00		456.83	43.17
Total	11,639.50		6,935.64	4,703.86
2023 (January thru August) Wells Ranch WTP Raw Water Use By Permit				
	Guadalupe County Wells		Gonzales County Wells	
	Carrizo	Wilcox	Carrizo	Acre-feet
#2 Deer Stand	457.60	#3 Deer Stand	#1 Tommy's	6.81
#4 Pig Trap	396.10	#6 Dead Man Tank	#5 Littlefield	528.19
#7 Dead Man Tank	256.72		#8 Chickenhouse	470.76
Total	1,110.41	Total	#9 Camphouse	445.34
Ground Water Permit Use		Contract	#11 Coastal Field	345.79
			#12 Bull Trap	275.84
Guadalupe Carrizo	1,110.41	2,603.42	#13 Bond West	225.39
Guadalupe Wilcox	1,107.73	3,026.00	#14 Christian West	528.55
Total Guadalupe	2,218.14	5,629.42	#15 Bond East	515.48
Total Gonzales Carrizo	3,647.56	7,400.00	#16 Christian East	305.42
			Total	3,647.56
Total Ground Water	5,865.70	13,029.42		7,163.72

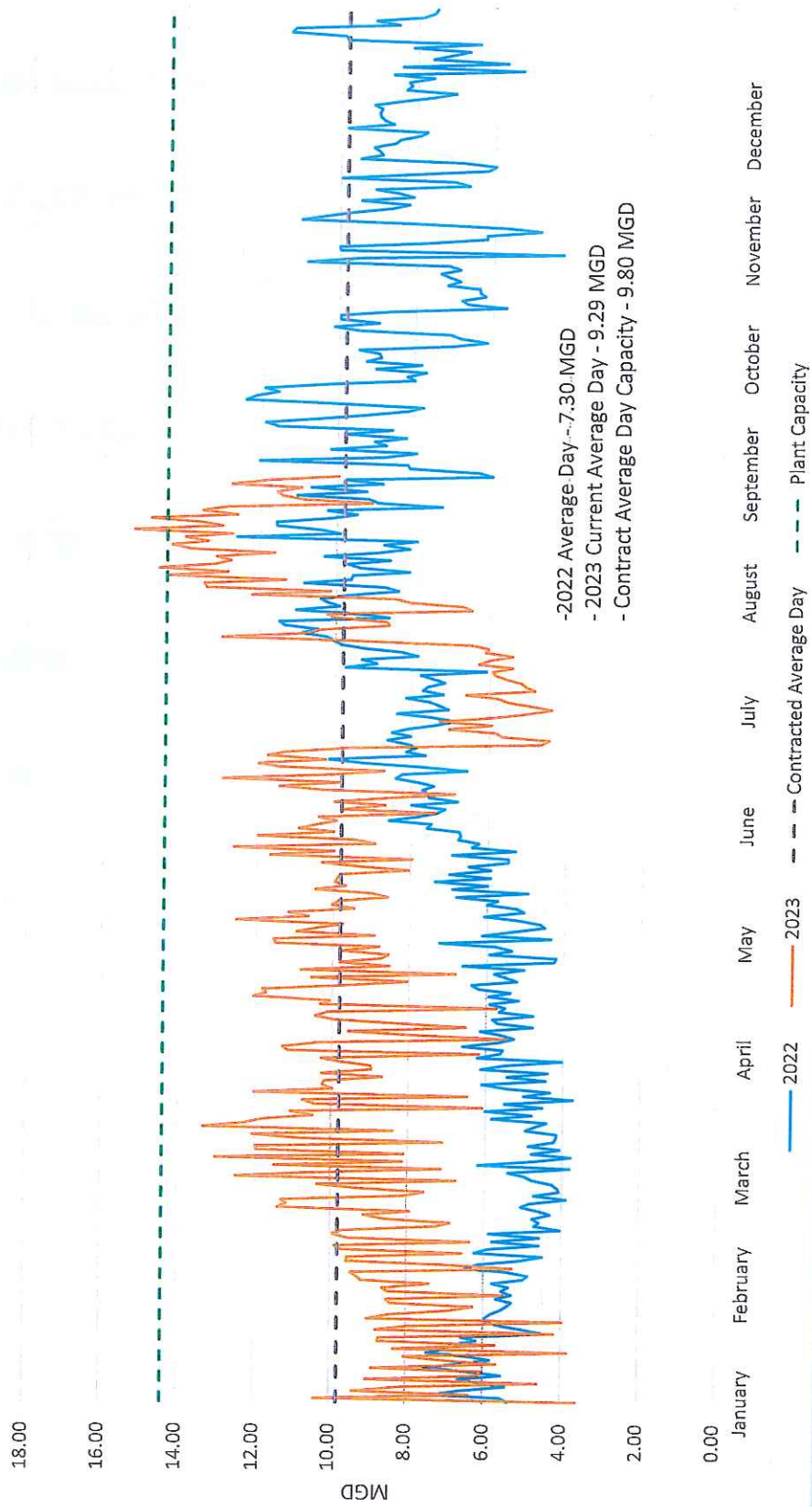


Lake Dunlap / Wells Ranch Water Usage Summary

Lake Dunlap Monthly Raw Water Demand Comparison							
2022				2023			
Month	Acre-feet	Month	Acre-feet	Month	Acre-feet	Month	Acre-feet
Jan-22	572.33	Jul-22	857.51	Jan-23	686.98	Jul-23	691.85
Feb-22	424.65	Aug-22	896.95	Feb-23	751.16	Aug-23	1,204.78
Mar-22	462.09	Sep-22	869.85	Mar-23	967.84	Sep-23	0.00
Apr-22	514.80	Oct-22	752.27	Apr-23	855.36	Oct-23	0.00
May-22	573.38	Nov-22	745.02	May-23	969.72	Nov-23	0.00
Jun-22	724.71	Dec-22	783.07	Jun-23	807.93	Dec-23	0.00
Total Raw Water Demand			8,176.63	Total Raw Water Demand			6,935.62



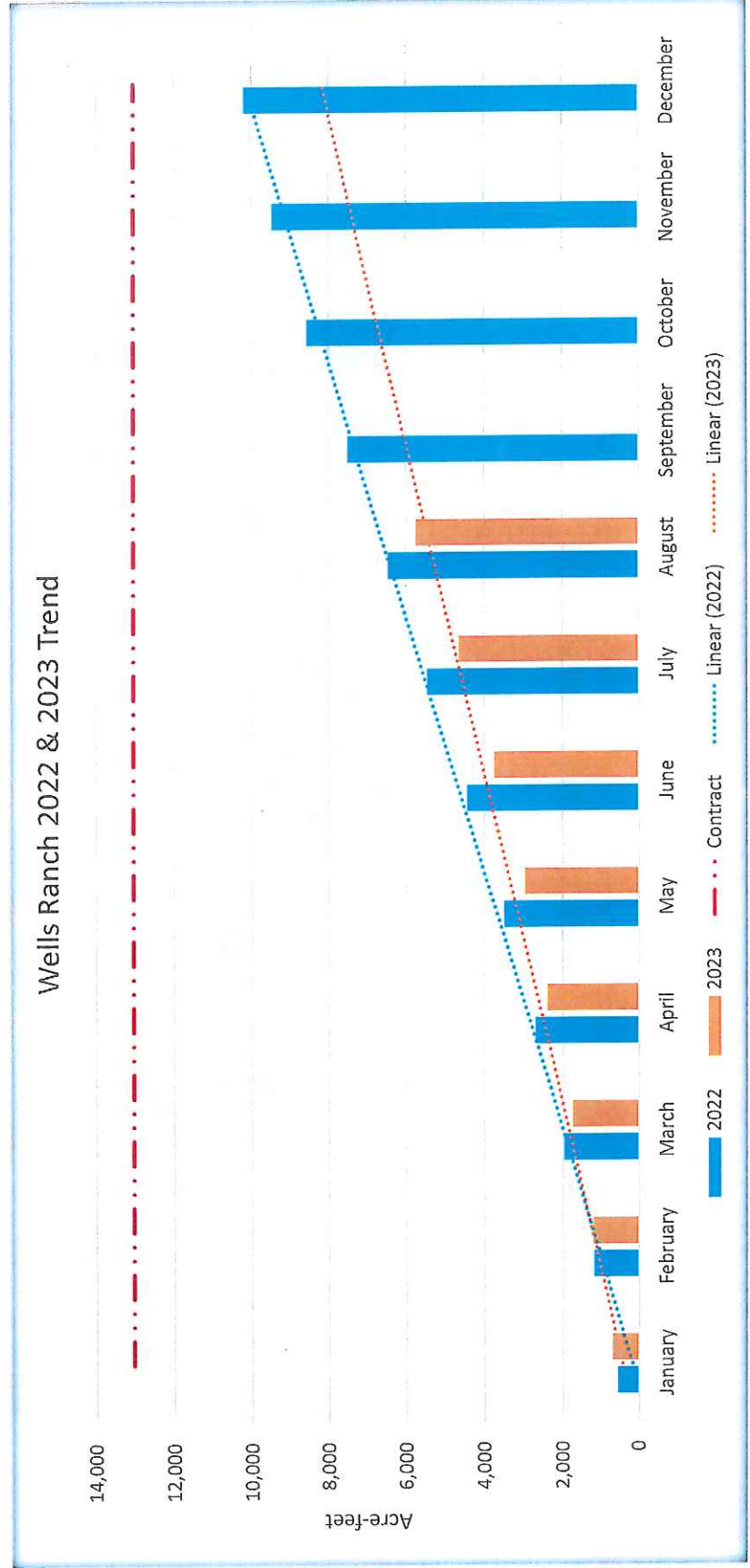
Lake Dunlap Daily Production



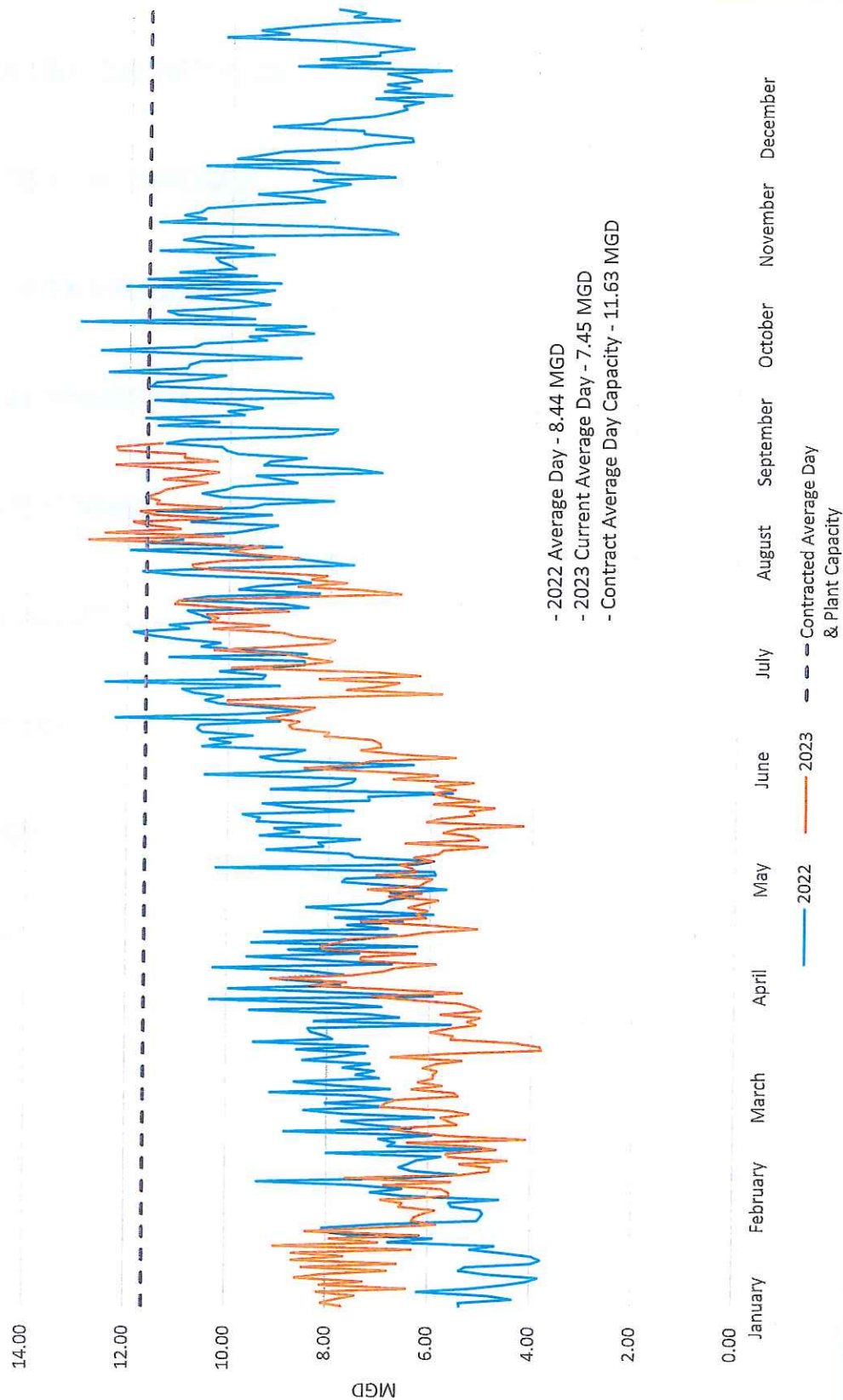


Lake Dunlap / Wells Ranch Water Usage Summary

Wells Ranch Monthly Raw Water Demand Comparison					
2022			2023		
Month	Acre-feet	Month	Acre-feet	Month	Acre-feet
Jan-22	543.95	Jul-22	1,012.23	Jan-23	688.36
Feb-22	628.97	Aug-22	1,006.51	Feb-23	505.62
Mar-22	781.50	Sep-22	1,036.18	Mar-23	539.66
Apr-22	738.84	Oct-22	1,070.70	Apr-23	652.24
May-22	798.43	Nov-22	899.18	May-23	565.48
Jun-22	942.32	Dec-22	730.66	Jun-23	772.66
Total Raw Water Used		10,189.48	Total Raw Water Used		
					5,724.88



Wells Ranch Daily Production



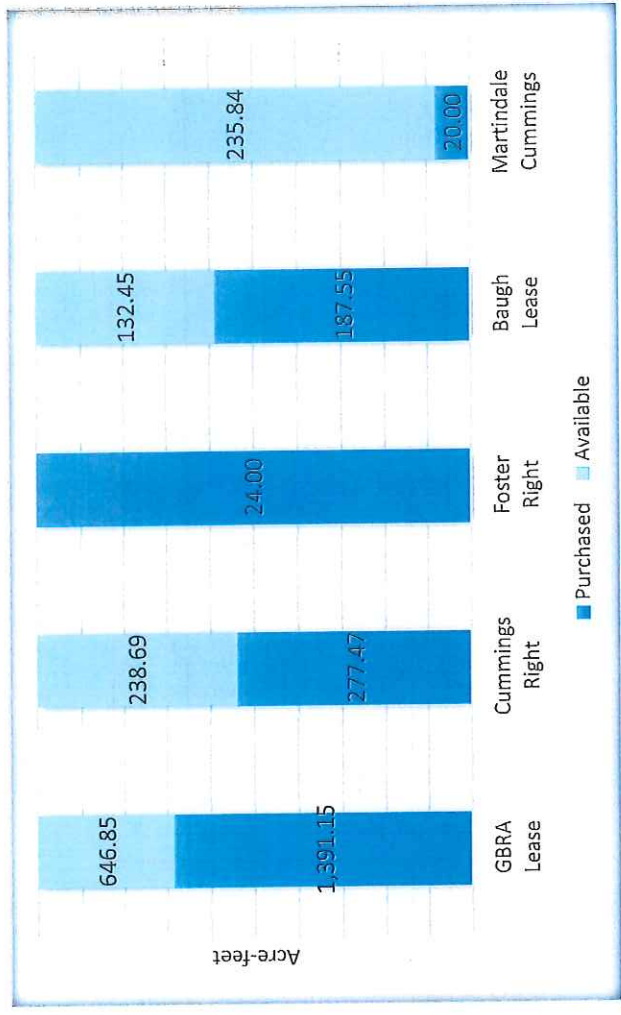


Hays Caldwell Water Treatment Plant Water Use Summary

YEAR 2023 (January thru August)				
CRWA Raw Water Inventory	Acre-feet	Raw Water Usage		
GBRA Take or Pay Leased Water	2,038.00	³ GBRA Take or Pay Leased Water		
Cummings/CRWA 18-3887	516.16	Cummings/CRWA 18-3887		
Foster 18-3889A	24.00	Foster 18-3889A		
Baugh 18-3888A - Leased	320.00	Baugh 18-3888A - Leased		
2023 Annual Total	2,898.16	YEAR 2023 (January thru August)		
Raw Water Rights by Others Inventory	Acre-feet	Raw Water Usage by Others		
¹ Cummings/Martindale 18-3887D	255.84	¹ Cummings/Martindale 18-3887D		
City of San Marcos	1,314.00	City of San Marcos		
² Annual Raw Water	2,898.16	⁴ Annual Contract		
YTD Total Use	1,880.16	Year End Total Use		
YTD Not Used	1,018.00	Year End Not Used		
% Used	65%	% Not Used	61%	39%

Comments:

- Martindale/Cummings 18-3887-D is a reference to the Amended and Restated Contract of 2021 Exhibit C, "Special Provisions Related to the Martindale Water Supply Corporation (Martindale WSC)." Martindale desires to use just one (1) AF/month on this right. Only Martindale may use this right.
- Annual Raw Water does not include Raw Water Rights by Others Inventory.
- GBRA Take or Pay Leased Water formula:
GBRA Used + GBRA Unused = GBRA Total Take.
- Annual Contract - Currently based on the 2021 Water Supply Contract, Exhibit A, Schedule I.





Hays Caldwell Water Treatment Plant Water Use Summary

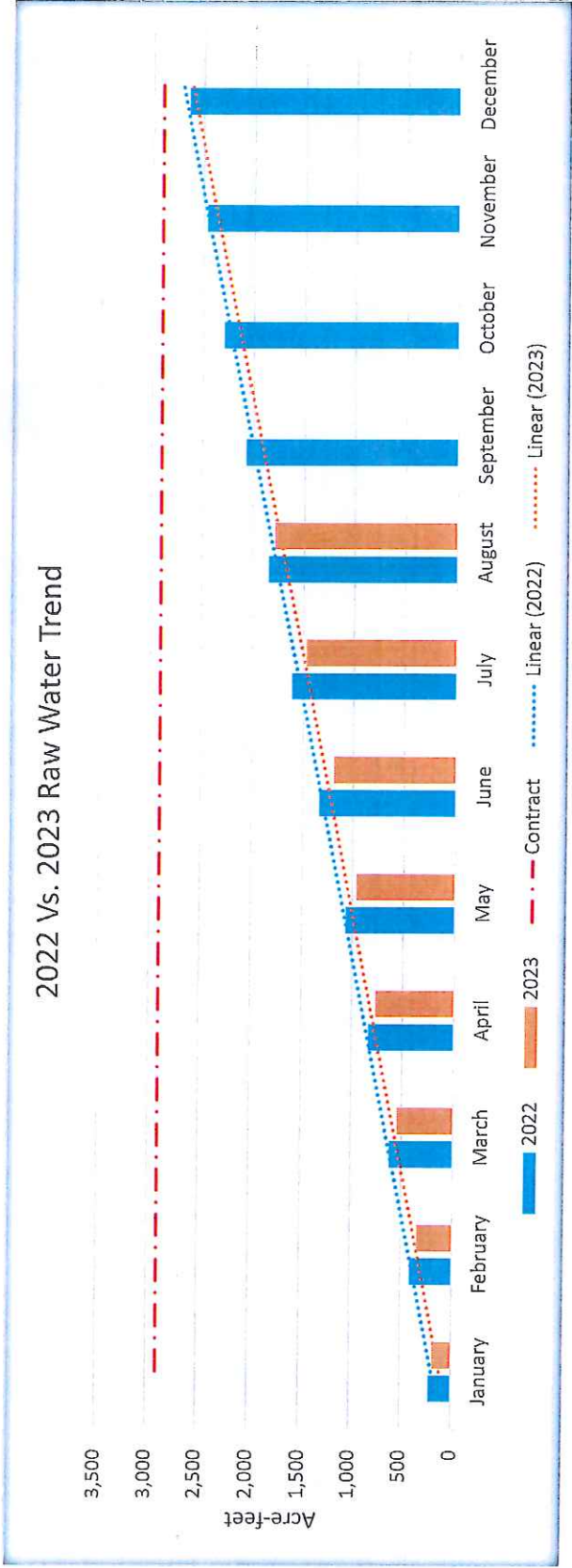
YEAR 2023 (January thru August)												
¹ Monthly Raw Water Use & Trend												
Month	Acre-feet	Month	Acre-feet	Month	Acre-feet	Month	Acre-feet	Month	Acre-feet	Month	Acre-feet	
Jan-22	212.43	Jul-22	274.95	Jan-23	180.05	Jul-23	279.01	Aug-22	194.56	Feb-23	160.90	
Feb-22	194.56	Aug-22	232.75	Feb-23	160.90	Aug-23	310.95	Mar-22	207.18	Mar-23	203.97	
Mar-22	207.18	Sep-22	226.18	Mar-23	203.97	Sep-23	0.00	Apr-22	214.89	Apr-23	216.95	
Apr-22	214.89	Oct-22	218.49	Apr-23	216.95	Oct-23	0.00	May-22	234.58	May-23	197.06	
May-22	234.58	Nov-22	171.90	May-23	197.06	Nov-23	0.00	Jun-22	266.96	Jun-23	231.36	
Jun-22	266.96	Dec-22	179.63	Jun-23	231.36	Dec-23	0.00	YEAR 2023				1,780.25
Total Raw Water Use				2,634.50				Total Raw Water Use				

2022 Vs. 2023 Raw Water Trend

Month	2022 (Acre-feet)	2023 (Acre-feet)
January	100	100
February	150	150
March	200	200
April	250	250
May	300	300
June	350	350
July	400	400
August	450	450
September	500	500
October	550	550
November	600	600
December	650	650

Comments:

¹ Monthly Raw Water Use & Trend is based on actual usage.

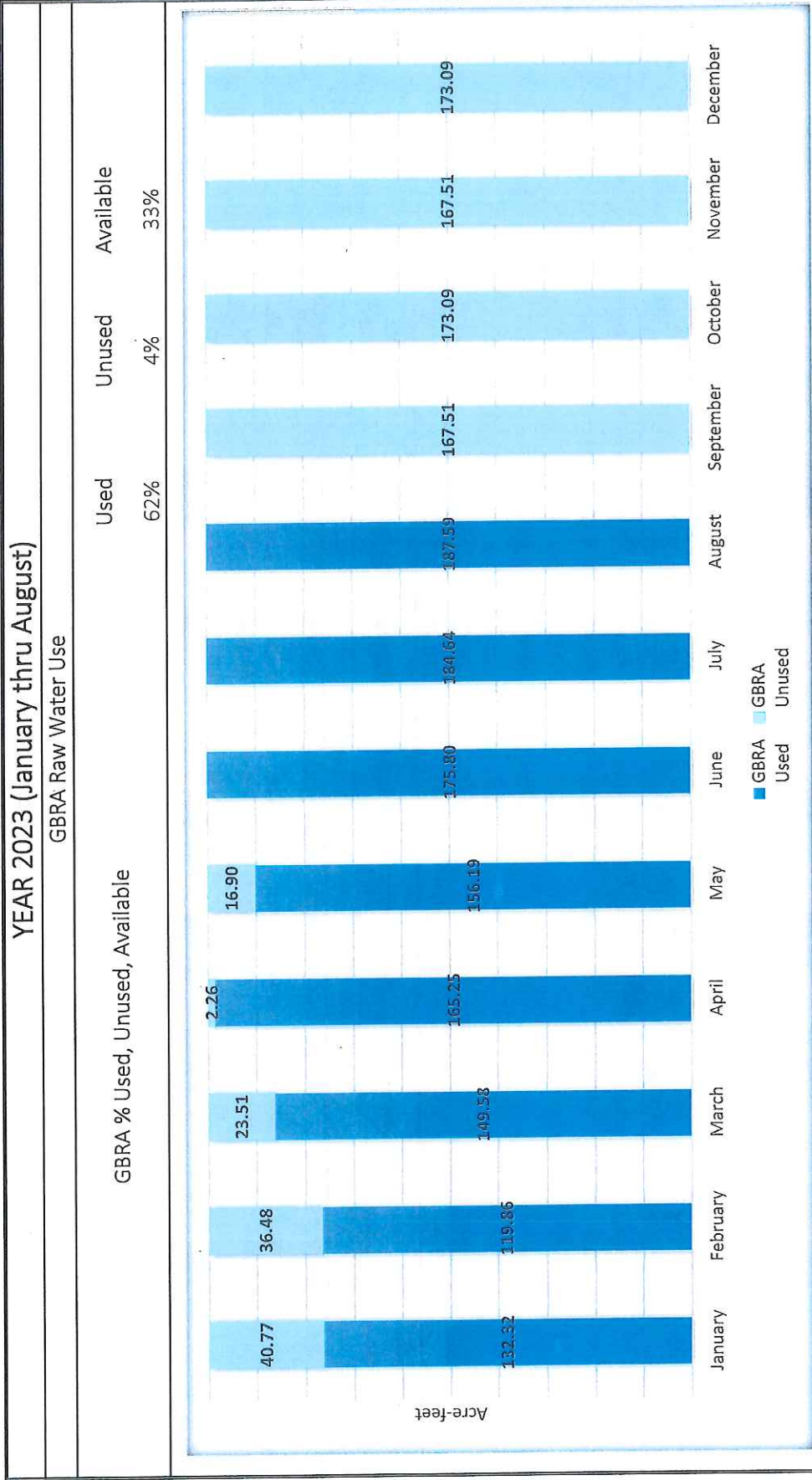


Comments:

¹ Monthly Raw Water Use & Trend is based on actual usage.



Hays Caldwell Water Treatment Plant Water Use Summary



Comments:



Hays Caldwell Water Treatment Plant Water Use Summary

YEAR 2023 (January thru August)									
Treated & Raw Water Use by Entity									
Treated (Delivered) Water	Month	County Line Acre-feet	Crystal Clear Acre-feet	Martindale Acre-feet	Maxwell Acre-feet	CoSM Acre-feet	Total Treated Acre-feet	Comments:	
	Jan-23	55.74	48.00	8.85	61.14	0.00	173.72		
	Feb-23	57.69	42.03	8.72	52.57	0.00	161.01		
	Mar-23	80.23	49.52	7.14	58.39	0.00	195.28		
	Apr-23	81.28	56.96	7.23	62.84	0.00	208.31		
	May-23	85.66	42.34	7.62	63.28	0.00	198.91		
	Jun-23	93.42	51.41	10.63	65.74	0.00	221.21		
	Jul-23	115.48	66.91	12.94	73.26	0.00	268.60		
	Aug-23	134.40	68.50	9.90	81.48	0.00	294.28		
	Sep-23	0.00	0.00	0.00	0.00	0.00	0.00		
	Oct-23	0.00	0.00	0.00	0.00	0.00	0.00		
	Nov-23	0.00	0.00	0.00	0.00	0.00	0.00		
	Dec-23	0.00	0.00	0.00	0.00	0.00	0.00		
	Total	703.91	425.68	73.02	518.70	0.00	1,721.30		
Percentage Treated Water	Month	County Line % Use	Crystal Clear % Use	Martindale % Use	Maxwell % Use	CoSM % Use	Total % Use		
	Jan-23	32.08%	27.63%	5.09%	35.19%	0.00%	100.00%		
	Feb-23	35.83%	26.11%	5.41%	32.65%	0.00%	100.00%		
	Mar-23	41.08%	25.36%	3.66%	29.90%	0.00%	100.00%		
	Apr-23	39.02%	27.34%	3.47%	30.17%	0.00%	100.00%		
	May-23	43.07%	21.29%	3.83%	31.82%	0.00%	100.00%		
	Jun-23	42.23%	23.24%	4.81%	29.72%	0.00%	100.00%		
	Jul-23	42.99%	24.91%	4.82%	27.28%	0.00%	100.00%		
	Aug-23	45.67%	23.28%	3.36%	27.69%	0.00%	100.00%		
	Sep-23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
	Oct-23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
	Nov-23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
	Dec-23	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
YTD Percentage Take		40.89%	24.73%	4.24%	30.13%	0.00%	100.00%		



Hays Caldwell Water Treatment Plant Water Use Summary

YEAR 2023 (January thru August)									
Treated & Raw Water Use by Entity									
¹ Raw Water Use	Month	² Total Treated Acre-feet	³ Total Raw Acre-feet	County Line Acre-feet	Crystal Clear Acre-feet	Martindale Acre-feet	Maxwell Acre-feet	CoSM Acre-feet	
	Jan-23	173.72	180.05	57.77	49.75	9.17	63.36	0.00	
	Feb-23	161.01	160.90	57.65	42.01	8.71	52.54	0.00	
	Mar-23	195.28	203.97	83.80	51.72	7.46	60.99	0.00	
	Apr-23	208.31	216.95	84.66	59.32	7.53	65.44	0.00	
	May-23	198.91	197.06	84.87	41.95	7.55	62.70	0.00	
	Jun-23	221.21	231.36	97.71	53.77	11.12	68.76	0.00	
	Jul-23	268.60	279.01	119.96	69.51	13.44	76.10	0.00	
	Aug-23	294.28	310.95	142.02	72.38	10.46	86.09	0.00	
	Sep-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Oct-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Dec-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total	1,721.30	1,780.25	728.43	440.41	75.44	535.98	0.00	

Comments:

¹Raw Water Use Formula:

$$\% \text{ Use} = \frac{\text{"Entity" Treated Water}}{\text{Total Treated}} \times 100$$

$$\text{Raw Water Use} = \text{Total Raw Use} \times \text{"Entity" \% Use}$$

²Total Treated - Metered treated water delivered to the participating members. Individual Entity use can be seen in the table on page 4.

³Total Raw - The total amount of Raw Water that was delivered to the plant for treatment.

Alliance Regional Water Authority Update for CRWA Board Meeting



Graham Moore
(August 2023)

Board Meeting Activities in August:

- Below are items that the Board took up at the August Board meeting:
 - Adopted the FY 2023-24 budget.
 - Received a presentation on funding options for the remaining Phase 1B projects and the possible Phase 1C/1D expansions.
 - Discussed the Executive Director's performance evaluation in Executive Session.

Phase 1B Program

- Water Treatment Plant – electrical switchboards are delayed and therefore the projected substantial completion date has been pushed back to February 2024; continued site work including grading and culverts; set the well surge tanks; installed walls above the CMU in the filter building; continued excavation for detention pond; placed the balder tank and surge tank building foundation and placed the drying bed laterals, gravel and sand.
- Booster Pump Station – substantial completion now set for December 2023; installed cathodic test stations; started detention pond trickle channel; continued electrical installation in Electrical Building; continued investigation of pump station slab.
- Segment A – all pipe is laid except for either side of the Plum Creek crossing; grouted the pipe in the Plum Creek tunnel; started building out vertical risers on either side of the tunnel; started corrections of over-compaction in identified areas; fiber innerduct installation continues on the project.
- Segment B – over 90% of the pipe is installed; continuing open cut installation around SH-183; identified 20 sticks of pipe damaged by a grass fire – pipe manufacturer is scheduled to review options for repair/replacement; setting precast structures for pipeline appurtenances.
- Segment C –Environmental report with the TWDB for review; final design plans are underway as are acquisitions.
- Segment D – over 50% of the pipeline is installed; two open-cut crews are underway; all but 1 minor tunnel is complete; work is continuing on the shafts for the San Marcos River crossing.
- Segment E – pipe manufacturing is underway with deliveries expected to begin week of 9/18; the Guadalupe River Crossing is currently scheduled to begin in October.
- Elevated Storage Tanks – most of the pedestal is complete with the dome work to be formed for concrete placement in the near future.
- Property acquisition is continuing for all parcels in Segments C and the Raw Water properties.

Utility Engineering Group, PLLC
191 N. Union Ave., New Braunfels, Texas 78130
Tel 830.214.0521



PROJECT STATUS REPORTS

PROJECT STATUS REPORT SUMMARY

REPORT DATE

September 5, 2023

PREPARED BY

David Kneuper, P.E. – Utility Engineering Group

CRWA GIS SYSTEM STATUS SUMMARY

Utility Engineering Group (UEG) is currently working with Canyon Regional Water Authority (CRWA) Staff to perform the field work verification portion of the CRWA Geographic Information System (GIS) Phase IV Project. Additionally, UEG is compiling required as-built plans and information for GIS system implementation.

Since the last project status report to CRWA, UEG has been working to develop a plan to finalize the data collection process. UEG met with CRWA on 8/24/2023, to compile the remaining as-built plans and information. UEG is currently working to upload the provided information to the GIS system.

Following receipt of all requested as-built information from CRWA, UEG will complete the base scope of services within 8 weeks. Currently \$39,650.00 (45%) of the total project budget (\$72,470) has been invoiced. Presently, there are no current issues or associated risks with the project.

TXDOT/CRWA IH-10 (SANTA CLARA & ZUEHL) TRANSMISSION LINE ENCASEMENT STATUS SUMMARY

The project includes the addition of approximately 150 LF of steel split casing on the existing CRWA transmission main at Santa Clara Road and the relocation and encasement of approximately 200 LF of the transmission main at Zuehl Road. The project is required due to the reconstruction of the two intersections by the Texas Department of Transportation (TxDOT) with their IH-10 expansion project. UEG is coordinating with TxDOT and the Contractor to finalize the pricing and supplemental agreement to revise the casing pipe installation method from open cut to bore at Zuehl Road.

Since the last status report update, UEG has had several meetings with TxDOT and the Contractor to verify the final change order costs and to review the proposed supplemental agreement.

Once the notice-to-proceed is issued, the contract documents give the contractor 120 calendar days to reach substantial completion. The contract amount is currently \$529,901.90 including change order number one (fully reimbursable). Presently, there are no current issues or associated risks with the project.

TXDOT/CRWA FM 1518 TRANSMISSION LINE RELOCATION STATUS SUMMARY

The project includes the offset and bore of a new section of 30-Inch CRWA transmission main, approximately 250 LF, across FM 1518 at the intersection with Lower Seguin Road. The project is required

due to the TxDOT widening of FM 1518 and associated drainage improvements. The TxDOT Standard Utility Agreement has been executed by both the Board of Trustees and TxDOT.

Since the last status report, UEG coordinated the project bid opening on August 29, 2023. Four bids were received with RAM Utilities, LLC being the low bidder. UEG has prepared a bid recommendation letter for the CRWA's consideration.

The Engineer's Opinion of Probable Project Cost was approximately \$757,050. The low bid from RAM Utilities, LLC is \$731,420.79. The project is not fully reimbursable, based on the approved Standard Utility Agreement with TxDOT, approximately \$146,430.22 (20.02%) would be reimbursable. Presently, there are no current issues or associated risks with the project.

WATER SYSTEM STANDARDS & TECHNICAL SPECIFICATIONS DEVELOPMENT STATUS SUMMARY

The project includes the preparation, review, and finalization of a new set of water system standards, technical specifications, and forms. The proposed water system standards are limited to CRWA's facilities related to the water transmission main system.

Since the last status report, UEG provided CRWA with a set of draft water system details on 8/22/2023 for review. A draft water system details review meeting has been scheduled for 9/8/2023. Additionally, UEG is continuing work on the draft water system technical specifications, with an anticipated submittal to CRWA Staff in September.

Currently \$2,217.50 (9%) of the total project budget (\$24,760) has been invoiced. Presently, there are no current issues or associated risks with the project.



memorandum

To: Mr. John Kaufman, General Manager
From: Canyon Regional Water Authority
cc: Trihydro Corporation
Date: September 1, 2023
Re: Trihydro Corporation – CRWA Engineering Report

MASTER PLAN

- Project consists of developing Master Plan Report and Capital Improvements to address future water demand of Entities
- Iterative process requiring input from multiple parties
- 90% Capital Improvements and Master Plan Report to be delivered to CRWA Staff for review on April 25, 2023
- Meeting to discuss comments with CRWA Staff held in July 13, 2023.
- 100% Capital Improvements and Master Plan Report sent via email to CRWA Staff on 9/1/23.

WELLS RANCH III

- Project consists of developing Preliminary Engineering Report and Capital Improvements costs to address future water demand of Entities
- Iterative process requiring input from multiple parties
- Trihydro met with Entities on 2/9/23 to obtain input on Wells Ranch III improvements
- Trihydro is currently updating Service Plan and cost estimates per input received at 2/9/23 meeting
- Updated deliverables sent to CRWA Staff for review on 2/24/23.
- Meeting with Entities, CRWA, and Trihydro took place on 3/2/23 to discuss updated costs.
- Updated deliverables slated to be sent to CRWA Staff for review on 3/7/23
- Project is approximately 80% billed and 80% complete.
- Trihydro and CRWA Staff met with Entities on 5/11/23.
- Updated deliverables sent to CRWA Staff for review on 6/1/23.
- Meeting with Entities slated for August 10, 2023.
- Submittal of draft report for CRWA review slated for 9/22/23

Memo

To: John Kaufman, General Manager
Canyon Regional Water Authority

From: Yue Sun, P.E., BCEE
Byron Sanderfer, P.E.

Date: September 6, 2023

Re: Project Status Report for:
Hays Caldwell WTP Improvements

Work in Progress through September 5, 2023:

Hays Caldwell WTP Improvements

1. **TWDB approved the loan scope reduction and feasibility report update and is currently reviewing the Contract Documents for approval before bidding.**
 - *Updated Categorical Exclusion with NWP permit renewal approval was submitted on 7/18/23.*
 - *TWDB is waiting for a floodplain permit from Caldwell County to complete their review.*
2. **USACE Nation-Wide Permit renewal requires an aquatic survey to finalize environmental clearance with TWDB. Currently, expect to finish the permit renewal in August/September due to anticipated review time by USACE.**
 - *Received NWP 58 approval.*
3. **Hazard Mitigation Grant Program (HMGP) application for floodproofing elements**
 - *Received notice to proceed on 8/24/23, working on the application documents.*
4. **Coordinating with City of San Marcos (CoSM) and Caldwell County for permitting approvals:**
 - *CoSM - Site Preparation Permit and CoSM Plat resubmitted. CoSM Watershed Protection Plan were resubmitted.*

Mr. John Kaufman
Project Status Report
Hays Caldwell WTP Improvements
September 6, 2023
Page 2 of 2

- *Held a pre-submission meeting with Caldwell County and submitted the documents on 8/14/23; comments received on 9/4/23; addressing the comments, will resubmit on 9/8/23.*
- *Coordination with CoSM Consultants for pipeline and interconnection: Continue with coordination as needed.*

5. Jar Testing Evaluation of Ozonation upstream of Filtration for Filter and Chemical Optimization.

- *Processing data and drafting the technical memorandum.*

HCWTP Koch Membrane Replacement Project

1. Scope discussion was held on Friday, 8/25/23. Updated the scope of work and level of effort after the meeting.

**CANYON REGIONAL WATER AUTHORITY
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
09/11/2023	FY 2024 BUDGET	CRWA 23-09-052

INITIATED BY

REGINA FRANKE / JOAN WILKINSON / JOHN KAUFMAN

STAFF RECOMMENDATION

Approve the FY 2024 Budget for Canyon Regional Water Authority (CRWA) as presented by the CRWA Budget Committee.

BACKGROUND INFORMATION

The FY 2024 Budget was carefully prepared by CRWA Staff and closely reviewed by the Budget Committee. CRWA Staff and the Budget Committee recommend approval of the FY 2024 Budget, which is included herein by reference.

FINANCIAL IMPACT

The financial impact of the FY 2024 Budget is thoroughly described in the budget document.

MOTION

Motion to approve the following resolution.

AT
for GM

CANYON REGIONAL WATER AUTHORITY

RESOLUTION No. 23-09-052

BE IT RESOLVED that the FY 2024 Budget for Canyon Regional Water Authority is approved.

Adopted this 11th day of September 2023

Ayes ____ Nays ____ Abstained ____ Absent ____

Approved by: _____
Timothy D. Fousse, CPM
President

Certified and attested by: _____
Doris Steubing
Secretary

Bond Payments:

LD-MC Series 2016

Annual contribution based on Debt Payment Schedules to retain 3 months of payments in reserve account after July Payment.

Wells Ranch Phase I

Series 2016 and Series 2021 based on Debt Payment Schedules and will retain 3 months of payments in reserve account after July payment.

Wells Ranch Phase II

Series 2015 based on Debt Payment Schedule and will retain 3 months in reserve account after July payment.

Hays Caldwell

Series 2005 annual payment to be paid by funds from the City of San Marcos' contribution to the original project.
Series 2017, Series 2021 and Series 2021 (Water Rights Project) based on Debt Payment Schedules and will retain 3 months of payments in reserve account after July payment.

Raw Water Costs:

LD-HC

GBRA raw water rate to increase to \$175.00 per A/F from \$165.00 per A/F. Out of District surcharge will be eliminated effective December 31, 2023

WR

Wells Ranch raw water lease payments are determined by the current GBRA rate for raw water, CPI adjustments and contract amendments. Also included is additional 14,500 acre feet of water for Wells Ranch III.

Line Use & Delivery:

HC

GBRA regional raw water delivery system rate will remain the same at \$0.595 per 1,000 gallons.

Operations & Maintenance:

LD-MC-HC-WR-ADMIN

Fixed Operations & Maintenance costs are based on plant contracts.

Insurance: Real and Personal Property includes a rate increase of 6% with a 12% inflation factor for property values. Auto & Mobile Physical damage has a rate increase of 6%.

Annual personnel costs increased by approximately \$622,000 over the prior years budget. This includes a 5% COLA and 3% merit increase in employee wages. This also includes adding an assistant general manager to administrative staff, replace Director of Water Resources with a staff engineer and the addition of a plant operator, increase in cost of health care benefits of 49%, contributing 50% to employee cost of dependent insurance, providing employee LTD and STD and additional life insurance coverage through TCDRS. Personnel costs include wages, payroll taxes, employee health care benefits, TCDRS retirement plan and workers compensation insurance.

Plant facilities and pipeline personnel costs based on percentage of time for each location.

Lab testing fees adjusted for increased frequency in testing done by outside lab providers, along with increased pricing of lab supplies.

Plant & Booster Station generator, compressor and grounds maintenance based on annual contracts with service provider.

**FY 2024
Budget Highlights**

Board of Trustees Meeting
September 11, 2023

Increase operator clothing allowance from \$300 to \$500 per employee.

Water sales projections increased 3% over FY 2023. Sales determined by prior actual usage and/or entity projections.

Variable costs of chemicals and electric usage based on projected sales with an average increase of 21% in chemical costs and electricity rates increasing about 5%

LD Plant operations include 57% increase in oxygen tank rentals and \$60,000 truck purchase.

WR Maintenance & repair costs adjusted over FY 2023 for increased costs in maintaining well pumps and tonka filters. Includes \$20,000 for well field roadway repairs. Also included is purchase of bobcat for \$40,000

MC Plant maintenance includes pipeline and valve repairs of \$200,000.

HC Plant operations includes forklift for \$30,000 and truck for \$50,000

ADMIN Administrative cost allocation is based on cost of service instead of plant contracts, per 2019 Rate Study by NewGen Strategies.

Membrane Funds:

LD Continue with 10 year amortization schedule created in FY 2020 for replacement of membrane cartridges in 2030.

HC

The membrane fund includes \$480,000 for rental of temporary membrane trailer until permanent replacement can be made.

Repair & Replacement Funds:

LD-MC-WR-HC

Repair & Replacement Fund is \$1,767,000 with allocation based on total Plant Contracts. This fund will be used for major repairs due to aging infrastructure (Clarifier repairs, generator replacement at LD, Ozone Parts, VFD's and major well repairs at Well Sites, Air Compressor and Dryer at WR). Also, change orders to pipeline projects at FM 1518, IH-10 and FM 621.

ARWA:

\$6,275,109 is included in the budget with division allocation based on signed contracts with Crystal Clear SUD, Green Valley SUD, County Line SUD and Martindale WSC.

CANYON REGIONAL WATER AUTHORITY
FY 2024
Budget

Board of Trustees Meeting
September 11, 2023

Entity	Total Budget	Bond Payments	Raw Water	Plant O&M	Membrane Funds	Line Use & Delivery	Repair & Replacement	CRWA Admin
Lake Dunlap								
SAWS	\$1,951,565.68	\$616,934.60	\$651,980.00	\$351,201.66	\$19,720.99	\$0.00	\$174,447.14	\$137,281.29
Cibolo	\$693,500.71	\$216,808.44	\$236,250.00	\$123,422.30	\$6,930.52	\$0.00	\$61,305.71	\$48,783.74
SAWS/Springs Hill-Prorated Oct-Dec	\$69,698.77	\$22,033.38	\$23,285.00	\$12,542.92	\$704.32	\$0.00	\$6,230.25	\$4,902.90
SAWS-Prorated Jan-Sep	\$209,096.32	\$66,100.14	\$69,855.00	\$37,628.75	\$2,112.96	\$0.00	\$18,690.76	\$14,708.71
East Central	\$776,986.21	\$246,773.84	\$257,480.00	\$140,480.66	\$7,888.40	\$0.00	\$69,778.86	\$54,656.46
Green Valley	\$983,035.36	\$317,280.65	\$167,128.00	\$180,618.00	\$10,142.22	\$0.00	\$89,715.67	\$69,150.82
Marion	\$54,545.67	\$17,626.70	\$17,500.00	\$10,034.33	\$563.46	\$0.00	\$4,984.20	\$3,836.97
Crystal Clear	\$178,607.48	\$88,133.51	\$0.00	\$50,171.67	\$2,817.28	\$0.00	\$24,921.02	\$12,564.00
Springs Hill	\$1,058,934.47	\$343,720.70	\$336,875.00	\$195,669.50	\$10,987.41	\$0.00	\$97,191.98	\$74,489.88
Lake Dunlap Totals	\$5,975,970.67	\$1,935,411.96	\$1,909,281.00	\$1,101,769.77	\$61,867.57	\$0.00	\$547,265.60	\$420,374.77
Mid Cities								
SAWS	\$1,544,272.21	\$875,246.70	\$0.00	\$385,947.80	\$0.00	\$0.00	\$174,447.14	\$108,630.57
Cibolo	\$386,068.05	\$218,811.68	\$0.00	\$96,486.95	\$0.00	\$0.00	\$43,611.78	\$27,157.64
SAWS/Cibolo	\$220,610.32	\$125,035.24	\$0.00	\$55,135.40	\$0.00	\$0.00	\$24,921.02	\$15,518.65
East Central	\$617,708.88	\$350,098.68	\$0.00	\$154,379.12	\$0.00	\$0.00	\$69,778.86	\$43,452.23
Green Valley	\$220,610.32	\$125,035.24	\$0.00	\$55,135.40	\$0.00	\$0.00	\$24,921.02	\$15,518.65
Marion	\$88,244.13	\$50,014.10	\$0.00	\$22,054.16	\$0.00	\$0.00	\$9,968.41	\$6,207.46
Mid Cities Totals	\$3,077,513.90	\$1,744,241.64	\$0.00	\$769,138.84	\$0.00	\$0.00	\$347,648.23	\$216,485.20
Wells Ranch								
SAWS	\$2,597,464.86	\$1,712,058.54	\$363,744.56	\$224,308.52	\$0.00	\$0.00	\$114,636.69	\$182,716.54
Cibolo	\$1,730,556.11	\$1,003,613.18	\$313,283.70	\$193,191.08	\$0.00	\$0.00	\$98,733.59	\$121,734.55
SAWS/Springs Hill-Prorated Jan-Sep	\$423,499.70	\$279,139.98	\$59,306.18	\$36,572.04	\$0.00	\$0.00	\$18,690.76	\$29,790.74
SAWS-Prorated Oct-Dec	\$141,166.57	\$93,046.66	\$19,768.73	\$12,190.68	\$0.00	\$0.00	\$6,230.25	\$9,930.25
East Central	\$1,369,646.32	\$560,546.61	\$585,385.57	\$97,525.45	\$0.00	\$0.00	\$49,842.04	\$96,346.65
Green Valley	\$4,839,840.81	\$2,387,964.82	\$1,277,958.00	\$551,572.71	\$0.00	\$0.00	\$281,890.63	\$340,454.64
Marion	\$186,319.26	\$112,109.32	\$31,629.96	\$19,505.09	\$0.00	\$0.00	\$9,968.41	\$13,106.48
Converse	\$366,930.02	\$188,359.98	\$79,074.90	\$48,762.72	\$0.00	\$0.00	\$24,921.02	\$25,811.39
Crystal Clear/Cibolo Prorated Oct-Dec	\$165,608.01	\$97,361.37	\$29,297.25	\$18,066.59	\$0.00	\$0.00	\$9,233.24	\$11,649.56
Crystal Clear Prorated Jan-Sep	\$490,173.53	\$292,084.11	\$87,891.76	\$54,199.77	\$0.00	\$0.00	\$27,699.71	\$28,298.18
Crystal Clear	\$292,272.87	\$19,359.64	\$245,352.03	\$5,011.83	\$0.00	\$0.00	\$2,561.38	\$19,987.99
Springs Hill	\$622,086.13	\$74,437.33	\$490,264.41	\$9,752.54	\$0.00	\$0.00	\$4,984.20	\$42,647.65
County Line	\$340,233.03	\$0.00	\$316,299.62	\$0.00	\$0.00	\$0.00	\$0.00	\$23,933.41
Maxwell	\$510,349.55	\$0.00	\$474,449.43	\$0.00	\$0.00	\$0.00	\$0.00	\$35,900.12
Wells Ranch Totals	\$14,076,146.78	\$6,820,081.54	\$4,353,706.11	\$1,270,659.03	\$0.00	\$0.00	\$649,391.94	\$982,308.16
LD/MC/WR Blended O&M								
SAWS	\$2,111,745.56	\$0.00	\$0.00	\$1,922,880.75	\$0.00	\$0.00	\$0.00	\$188,864.82
Cibolo	\$775,847.42	\$0.00	\$0.00	\$698,951.89	\$0.00	\$0.00	\$0.00	\$76,895.53
East Central	\$491,154.53	\$0.00	\$0.00	\$488,350.67	\$0.00	\$0.00	\$0.00	\$2,803.86
Green Valley	\$1,467,855.86	\$0.00	\$0.00	\$1,465,052.00	\$0.00	\$0.00	\$0.00	\$2,803.86
Marion	\$46,717.50	\$0.00	\$0.00	\$45,782.87	\$0.00	\$0.00	\$0.00	\$934.62
Converse	\$207,506.27	\$0.00	\$0.00	\$152,609.58	\$0.00	\$0.00	\$0.00	\$54,896.69
LD/MC/WR	\$5,100,827.13	\$0.00	\$0.00	\$4,773,627.76	\$0.00	\$0.00	\$0.00	\$327,199.38
Cost Per 1,000 gallons				\$0.94				
Crystal Clear	\$134,007.87	\$0.00	\$0.00	\$120,748.48	\$0.00	\$0.00	\$0.00	\$13,259.39
Springs Hill	\$651,764.99	\$0.00	\$0.00	\$591,667.56	\$0.00	\$0.00	\$0.00	\$60,097.43
LD/WR	\$785,772.85	\$0.00	\$0.00	\$712,416.04	\$0.00	\$0.00	\$0.00	\$73,356.81
Cost Per 1,000 gallons				\$0.74				
LD/MC/WR Blended O&M Totals	\$5,886,599.98	\$0.00	\$0.00	\$5,486,043.80	\$0.00	\$0.00	\$0.00	\$400,556.19

CANYON REGIONAL WATER AUTHORITY

FY 2024

Budget

Board of Trustees Meeting
September 11, 2023

Entity	Total Budget	Bond Payments	Raw Water	Plant O&M	Membrane Funds	Line Use & Delivery	Repair & Replacement	CRWA Admin
Hays Caldwell								
County Line	\$2,058,098.78	\$479,469.18	\$188,600.00	\$759,831.03	\$140,519.25	\$279,710.66	\$65,193.39	\$144,775.28
Crystal Clear	\$803,164.68	\$190,036.33	\$59,092.00	\$302,067.70	\$53,715.31	\$116,834.37	\$24,921.02	\$56,497.96
Martindale	\$457,370.21	\$191,023.21	\$19,262.00	\$101,139.59	\$47,914.06	\$43,628.47	\$22,229.55	\$32,173.33
Maxwell	\$1,406,526.78	\$362,771.60	\$113,696.00	\$490,592.60	\$96,687.56	\$198,980.21	\$44,857.84	\$98,940.98
San Marcos	\$222,293.31	\$0.00	\$0.00	\$0.00	\$141,163.83	\$0.00	\$65,492.44	\$15,637.04
Cost Per 1,000 gallons								
Hays Caldwell Totals	\$4,947,453.77	\$1,223,300.32	\$380,650.00	\$1,653,630.92	\$430,000.00	\$639,153.71	\$222,694.23	\$348,024.59
Alliance Regional Water								
Crystal Clear	\$3,461,809.10	\$0.00	\$0.00	\$3,461,809.10	\$0.00	\$0.00	\$0.00	\$0.00
County Line	\$632,013.19	\$0.00	\$0.00	\$632,013.19	\$0.00	\$0.00	\$0.00	\$0.00
Martindale	\$40,726.41	\$0.00	\$0.00	\$40,726.41	\$0.00	\$0.00	\$0.00	\$0.00
Green Valley	\$2,140,560.72	\$0.00	\$0.00	\$2,140,560.72	\$0.00	\$0.00	\$0.00	\$0.00
Alliance Regional Water Totals	\$6,275,109.42	\$0.00	\$0.00	\$6,275,109.42	\$0.00	\$0.00	\$0.00	\$0.00
City of La Vernia	\$79,797.19	\$0.00	\$57,023.93	\$0.00	\$0.00	\$17,160.00	\$0.00	\$5,613.27
WR/MC Buy-In - Converse	\$269,770.00	\$269,770.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
CRWA FY 2024 Total Budget	\$40,588,361.72	\$11,992,805.46	\$6,700,661.04	\$16,556,351.78	\$541,867.57	\$656,313.71	\$1,767,000.00	\$2,373,362.17
CRWA FY 2023 Total Budget	\$37,871,310.97	\$12,766,256.11	\$6,645,340.02	\$13,630,207.63	\$541,867.57	\$691,229.97	\$1,742,000.00	\$1,854,409.67
Difference	\$2,717,050.75	-\$773,450.65	\$55,321.02	\$2,926,144.15	\$0.00	-\$34,916.26	\$25,000.00	\$518,952.50
				\$1,131,682.83	Increase in Projected Sales & Cost per 1000/gallons			
				\$507,674.91	Increase in Fixed Operations & Maintenance			
				\$1,286,786.41	Increase In Alliance Regional Water			
				\$2,926,144.15				

**CANYON REGIONAL WATER AUTHORITY
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
09/11/2023	ENGINEERING SERVICES AGREEMENT	CRWA 23-09-053

INITIATED BY

JOHN KAUFMAN / ADAM TELFER / DAVID McMULLEN

STAFF RECOMMENDATION

Approve a partial engineering scope of work with Ardurra Group, Inc. ("Ardurra") for preliminary design services of the Hays Caldwell WTP Membrane Improvement Project for a cost not to exceed \$110,528.00 and approve a corresponding reimbursement resolution.

BACKGROUND INFORMATION

Ardurra was chosen by the ad hoc Hays Caldwell SOQ selection committee to prepare a scope of work and cost for design services in support of the Hays Caldwell WTP Nanofiltration Improvement Project that will bring the membrane treatment capacity to 6.0 MGD. Ardurra's scope of work includes a preliminary engineering design of the following project components:

- Demolition of existing membrane prefilters, membrane racks, and all ancillary components inside the membrane building and replacement with new membranes and associated subsystems and components such as membrane feed pumps, prefilters/strainers, backwash pumps, clean-in-place (CIP) chemical transfer pumps, and CIP waste handling equipment and associated piping, valves, actuators, and other appurtenances.
- Up to two (2) improvement alternatives will be evaluated for the membrane building improvements. Potential alternatives include the following and will be refined during the preliminary engineering evaluation: (1) expansion of the existing membrane building to provide space to house the new equipment; and (2) construction of a new membrane building to house new equipment.
- Associated architectural, structural, HVAC plumbing and fire protection, electrical, instrumentation control (SCADA), and site civil work for the proposed improvements.

Staff recently met with representatives of Hays Caldwell Entities, the City of San Marcos, and Ardurra to review Ardurra's proposed Scope of Work for the project. Based on these discussions and general agreement among the Entities and the City, Staff recommends that Ardurra be authorized to initiate design services under Task 1 for General Project Management and Quality Control, Task 2.1 of Task 2.0 for Data Collection and Review, and Task 3.1 of Task 3.0 for a Pilot Testing Protocol. Ardurra's proposed scope of engineering services for the preliminary design of the Project is attached. A Service Order will be prepared and executed pursuant to approval of this resolution.

FINANCIAL IMPACT

The financial impact is \$110,528.00 which will be reimbursed pursuant to a corresponding reimbursement resolution.

MOTION

Motion to approve the following resolution.

AT
for GM

CANYON REGIONAL WATER AUTHORITY

RESOLUTION No. 23-09-053

BE IT RESOLVED that a Service Order with Ardurra Group, Inc. (a Florida Corporation) to initiate design services under Task 1 for General Project Management and Quality Control, Task 2.1 of Task 2.0 for Data Collection and Review, and Task 3.1 of Task 3.0 for a Pilot Testing Protocol of Ardurra's overall scope of work for preliminary design services in support of the Hays Caldwell WTP Nanofiltration Improvement Project at a cost not to exceed \$110,528.00 is approved.

BE IT FURTHER RESOLVED that the expensed funds for this project will be reimbursed to Canyon Regional Water Authority through a Reimbursement Resolution.

Adopted this 11th day of September 2023

Ayes ____ Nays ____ Abstained ____ Absent ____

Approved by: _____
Timothy D. Fousse, CPM
President

Certified and attested by: _____
Doris Steubing
Secretary



August 10, 2023

Mr. John M. Kaufman
General Manager
Canyon Regional Water Authority
850 Lakeside Pass
New Braunfels, Texas 78130-8233

Regarding: Hays Caldwell Water Treatment Plant (HC WTP) Membrane Improvements
Proposal to Provide Professional Engineering Services for Preliminary Engineering Design
& Report

Dear Mr. Kaufman:

Ardurra Group, Inc. is excited to have the opportunity to submit this proposal to the Canyon Regional Water Authority (CRWA) to provide professional engineering services for preliminary engineering design and development of a preliminary engineering report (PER) for the CRWA HC WTP Membrane Improvements project.

Please find the attached Detailed Scope of Services description, level of effort fee estimate, and anticipated project schedule.

Based on the scope of services described in Attachment A, we propose to complete the work in the following amount:

Task	BASIC SERVICE TASKS	ADDITIONAL SERVICE TASKS	Notes
Task 1.0 - GENERAL PROJECT MANAGEMENT AND QUALITY CONTROL	\$75,728.00		
Task 2.0 - MEMBRANE ALTERNATIVE EVALUATION	\$60,252.00		Opportunities available for LOE optimization, pending final direction from CRWA
Task 3.0 - MEMBRANE PILOT STUDY	\$179,603.00		Opportunities available for LOE optimization, pending final direction from CRWA
Task 4.0 - PRELIMINARY ENGINEERING DESIGN	\$402,390.50		
Task 5.0 - REGULATORY AGENCY COORDINATION WITH TCEQ	\$28,581.00		

Task 6.0 - TWDB DWSRF FUNDING APPLICATION SUPPORT SERVICES		\$200,802.00	Required if CRWA would like to pursue State or Federal funds opportunities
Task 7.0 - MEMBRANE BUILDING CRITICAL DIMENSIONS/ELEVATIONS 3D LASER SCANNING		\$35,595.00	Required only if PER recommendation is to expand existing membrane bldg.
Task 8.0 - MISC. ADDITIONAL SERVICE TASKS	\$23,389.00	\$72,635.00	
TOTAL	\$769,943.50	\$309,032.00	

We look forward to beginning work on this important project and appreciate the opportunity to continue serving CRWA. Should you have any questions or need additional information, please feel free to contact me via email at ysun@ardurra.com, or via phone at 713.208.9463.

Respectfully,



Yue Sun, PE, BCEE
Group Leader / Project Director

Attachment A / Detailed Scope of Engineering Services

SCOPE OF SERVICES FOR CANYON REGIONAL WATER AUTHORITY HAYS CALDWELL WATER TREATMENT PLANT NANOFILTRATION SYSTEM IMPROVEMENTS PRELIMINARY ENGINEERING DESIGN PHASE

GENERAL

Canyon Regional Water Authority (CRWA) Hays Caldwell Water Treatment Plant (HC WTP) provides treated water to Maxwell Water Supply Corporation, Martindale Water Supply Corporation, Crystal Clear Special Utility District, and County Line Specific Utility District. Following planned capacity improvements, treated water will also be pumped to the city of San Marcos. The plant is currently rated for 3.44 MGD and is being upgraded to a treated flow capacity of 6 MGD, with the exception of the existing prefilters and membrane filtration system. The existing membrane system is Koch Targa II membrane filters which are failing and no longer manufactured. The purpose of this project is to upgrade the existing prefilter system and replace the existing Koch Targa II membranes. The replacement membranes will need to provide a production capacity of 6 MGD with a N+1 configuration.

The general scope of work includes preliminary engineering design of the following components based on a site visit and scoping meeting conducted on July 5, 2023:

- Demolition of existing membrane prefilters, membrane racks, and all ancillary components inside the existing membrane building and replacement with new membranes and associated subsystems and components such as membrane feed pumps, prefilters/strainers, backwash pumps, air scour blowers & compressors, clean-in-place system (CIP tank, CIP pumps, CIP chemical transfer pumps, and CIP waste handling equipment) and associated piping, valves, and actuators etc.
- Up to two (2) improvement alternatives will be evaluated for the membrane building improvements. Potential alternatives include the following and will be refined during the preliminary engineering evaluation: 1) expansion of the existing membrane building to provide additional space to house new equipment; 2) construction of a new membrane building to house new equipment.
- Associated architectural, structural, HVAC plumbing and fire protection, electrical, instrumentation control SCADA, and site civil work for the proposed improvements.

Upon receipt of notice to proceed, Engineer shall conduct alternative evaluation and development studies and perform preliminary engineering design service. Preparation of final design construction contract documents, assistance during bidding phase, engineering services during construction, commissioning and startup services, and application engineering services, will be included in future contract amendments.

Attachment A / Detailed Scope of Engineering Services

SCOPE OF WORK

The scope of work presented below describes the base level of services for this project by project task. Unless noted otherwise, all deliverables will be electronic PDF.

TASK 1.0 – PROJECT MANAGEMENT AND QUALITY ASSURANCE (BASIC SERVICE TASK)

1.1. Project Work Plan

Engineer will prepare a written project work plan that outlines the project scope and establishes procedures and protocol for executing the project. The project work plan will include: the scope of work; schedule; organizational structure; communications plan; document management procedures; and quality management procedures. The project work plan will be dynamic in nature and therefore periodically updated as required; action items and decisions will be tracked in an Action Item List and Decision Log.

Deliverables: Project Work Plan

1.2. Project Progress Meetings

Engineer will conduct an initial kickoff meeting with CRWA to introduce project team members, establish protocol and lines of communication, review project goals and objectives, gather all available documents pertinent to the project, and review the scope of work, and schedule.

Monthly progress meetings will be held during the course of the project with the CRWA staff to discuss aspects of the project tasks presently underway, review progress, project schedule, and upcoming issues. These meetings will generally be about two hours in duration. The appropriate Engineering team members shall attend the meetings to discuss pertinent issues. Up to four (4) progress meetings are planned for this Preliminary Engineering Phase of the project. Engineer will prepare draft meeting minutes within seven business days to submit to CRWA for review and approval. Final minutes will be issued after incorporating review comments.

All meetings will be held via Teams.

Deliverables: Meeting agenda and minutes

1.3. Project Team Coordination

Engineer will conduct regular coordination meetings with design team and subconsultants to coordinate design tasks, review all project elements, to facilitate development of preliminary engineering design. Up to six (6) internal team coordination meetings are planned for the Preliminary Engineering Phase of the project.

1.4. Quality Assurance/Quality Control

Engineer will perform quality assurance/quality control procedures during the project phase. These procedures will include a technical review of interim deliverables by senior technical advisors who are not directly involved with the project. The technical review will provide comments and suggestions concerning the various project deliverables for incorporation prior to submitting to CRWA. A half-day internal review meeting will be conducted for the Draft Preliminary Engineering Report to discuss technical review comments.

Attachment A / Detailed Scope of Engineering Services

Deliverables: Internal documentation of technical reviews and response logs

1.5. Project Monthly Progress Report and Invoices

Engineer will track and update the budget, schedule, progress of work, and potential changes to the scope of work. Engineer will provide a project status report and submit it with monthly invoice. The project status report will include summary of work completed to date, work planned for upcoming month, and schedule update as needed.

Deliverables: Project status reports and monthly invoices

Phase 1 Conceptual Design /Basis of Design Technical Memorandum

TASK 2.0 – MEMBRANE ALTERNATIVE EVALUATION (BASIC SERVICE TASK)

2.1. Data Collection and Review

Engineer will obtain and review available historical water quality data, plant operation data, operation reports, and other pertinent records, including but not limited to:

- Plant flows for last 5 years
- Available water quality data throughout treatment processes for last 5 years
- Plant disinfection CT study
- Electrical power billing record for last 5 years
- Any improvement projects and study reports since the commission of the plant

Engineer will prepare a data request list and review with CRWA at the Kick-off meeting. It is assumed data requested will be provided to the Engineer in an electronic format. Upon receiving the data, the Engineer will review, analyze, and perform a water balance analysis to develop the basis of design flow and hydraulic loading for the membrane improvements.

During the course of the project Engineer may identify other pertinent documents such as existing equipment O&M manuals and will make a request to CRWA.

2.2. Alternative Development and Conceptual Design

Under Phase 1, Engineer will evaluate membrane alternatives for the improvements. Engineer will utilize historical water quality data, full-scale membrane operation and performance data, and previous available pilot study report and studies to develop a process flow diagram, preliminary design parameters, conceptual equipment sizing and layout, planning level cost estimates in the alternative evaluation. Up to three (3) membrane systems (polymeric and ceramic) will be included in this evaluation.

Each of the three alternatives will be conceptually developed in sufficient details to conduct a present worth cost analysis.

Deliverables: Basis of Design Tech Memo Presenting Membrane Conceptual Design and Evaluation

2.3. Alternative Evaluation

Attachment A / Detailed Scope of Engineering Services

Engineer will evaluate membrane alternatives using criteria developed under Workshop 1 as described below. Engineer will develop conceptual level construction and O&M costs and non-cost screening criteria for each of the alternatives. Engineer will prepare a Technical Memorandum that documents alternative development, presents the evaluations, and recommends proposed improvement for pilot testing. Engineer will recommend up to two (2) membrane systems that best meet CRWA's project goals for subsequent pilot study.

Deliverables: Basis of Design Tech Memo Presenting Membrane Conceptual Design and Evaluation

2.4. Workshops

Engineer will conduct a series of workshops during this phase with CRWA staff and their stakeholders. Appropriate staff from Ardurra team, experienced in the individual topics to be covered at the workshops, will be available as needed to participate in each workshop. Engineer will provide a summary following each of the workshops, documenting the outcome and presenting action items to be completed.

- **Workshop 1 –Membrane Alternative Development.** A 2-hour workshop (via Teams) will be conducted to discuss alternative membrane technologies that may be evaluated for the membrane conceptual evaluation. The workshop will be conducted in conjunction with one of the Progress Meetings.

Both cost and non-cost evaluation criteria will be developed. The workshop will be conducted after historical facility operational and performance data have been gathered and analyzed. An example of evaluation criteria is provided in Table 1. This will be further refined with CRWA during the workshop.

CRWA staff will provide primary input as to the relative importance or weighting of the criteria. Subsequent Evaluations will be performed for the alternatives that are selected and agreed upon by CRWA.

Table 1 – Alternative Evaluation Criteria

	Evaluation Criteria	Weight
Cost	Capital Cost	TBD
	O&M Cost	TBD
	Life Cycle Costs	TBD
Non-Cost	Operational Flexibility and Complexity	TBD
	Maintenance Requirements	TBD
	Site Impacts & Expandability	TBD
	Ease of Implementation and Constructability	TBD

Attachment A / Detailed Scope of Engineering Services

	Impacts on Water Quality	TBD
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Deliverables: Workshop agenda and summary.

- **Workshop 2 – Alternative Ranking and Selection.** A 2-hour workshop (via Teams) will be conducted to discuss the membrane alternative evaluations and to conduct an alternative matrix analysis that ranks the alternatives based on weighted cost and non-cost criteria. The workshop will be conducted after alternatives evaluation and conceptual design is complete. Up to two (2) membrane technologies will be recommended for subsequent membrane pilot study. The workshop will be conducted in conjunction with one of the Progress Meetings.

Deliverables: Workshop agenda and summary.

TASK 3.0 – MEMBRANE PILOT STUDY (BASIC SERVICE TASK)

Following selection of membrane alternatives, a membrane pilot test will be conducted to develop full-scale design criteria and obtain regulatory approval from TCEQ. The pilot test will be conducted on the selected membrane system(s).

3.1. Pilot Testing Protocol

Engineer will develop a pilot testing plan that will be a comprehensive guide to the activities to be undertaken during the pilot phase investigations. The pilot testing protocols will outline and address the following:

- Objectives and goals.
- State requirements for membrane pilot testing.
- Raw water quality and treatment goals.
- Pilot layout, design criteria, ancillary requirements.
- Schedule.
- Testing procedures and description of operations.
- Testing matrix outlining the conditions, flows, loadings, duration, runs, and other relevant information for each proposed testing series.
- Water quality sampling, testing, and monitoring. It is assumed that CRWA will pay for laboratory testing. Analytical testing can be handled either via their in-house or contract testing laboratory. Engineer will assist to identify certified laboratories.
- Quality Assurance/Quality Control (QA/QC) procedures.
- Roles, responsibilities, and communications.
- Data collection, processing and reporting.

The Pilot testing protocol will be developed following TCEQ guidance for membrane pilot testing. The pilot study protocol will be submitted to CRWA for review comments. Upon incorporating review comments, the final test protocol will be submitted to TCEQ and comments will be incorporated into the Final Protocol prior to implementation.

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Engineer will coordinate with membrane suppliers and obtain pilot equipment data (dimensional drawings, design loading, hydraulics, analyzers and instruments, power requirements, etc.) and discuss the approved Pilot Testing Protocol with the membrane system supplier. This is to ensure that the supplier understands pilot testing requirements, data monitoring, and reporting, to meet expectation for subsequent pilot study report submittal.

Deliverables: Draft and Final Pilot Study Protocol.

3.2. Pilot Plant Facilities

The pilot plant will consist of membrane module pilot skids from the membrane system supplier(s), to mimic the full-scale treatment process as proposed for the improvements.

Pilot Facilities Design Document Development: Engineer will develop design documents of the pilot facilities for inclusion in the membrane pilot protocol. The documents will include:

- One line drawing indicating electrical supply and feed requirements.
- Process flow schematics indicating the arrangement of components, interconnection pipe sizes, valves & fittings, and other information.
- Raw water supply general layout drawings.
- Disposal of treated water, waste backwash water, chemical cleaning waste after neutralization.
- General plan view showing arrangement of equipment and key components.

Engineer will also assist to identify chemical suppliers that would be required for the pilot testing, estimated chemical quantities and obtained chemical safety handling procedures. It is assumed that pilot testing chemicals will be paid for by CRWA.

Pilot Facilities Installation and Start-up Assistance: The membrane system supplier is responsible for procuring pilot equipment in accordance with the membrane pilot facility design document. Construction of the pilot facilities, installation of the equipment, and demolition of the pilot facilities will be handled by the membrane system supplier. Shipping and unloading of the pilot equipment shall also be handled by the membrane system supplier. Engineer will coordinate delivery schedule with CRWA.

Engineer will make four (4) site visits (up to 8 hours each) to oversee construction of the pilot facilities and installation of pilot testing equipment. Engineer will perform a final walkthrough to make sure pilot setup/construction and equipment installation are in accordance with the layouts prepared. This level of effort assumes two (2) personnel for each site visit.

Engineer will participate in start-up and confirm that systems are operational. This level of effort assumes two (2) personnel in the field for a total of four site visits (8 hours each) to complete installation oversight, final walkthrough, and start-up of the pilot.

3.3. Pilot Operations

Engineer will provide personnel to maintain routine operation of the pilot, monitor and collect data required from the pilot equipment in accordance with the pilot sampling, monitoring, and analysis plan outlined in the Pilot Testing Protocol. Engineer will collect field water samples (raw,

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membrane feed, membrane filtrate, waste backwash water, etc.), perform onsite field testing at either HC WTP or LD WTP lab, and coordinate required analyses by certified laboratories. Engineer will be responsible for coordinating with testing laboratory for delivery of sample bottles, chain-of-custody, and sample shipment. Engineer will document daily operation logs, event logs, field grab sample results, field issues and observations etc.

Engineer will provide one half-time staff (eight hours per day on Mondays and Wednesdays, and 4 hours per day on Fridays) to maintain operations and collect the data required from the pilot equipment. For Tuesdays, Thursdays and weekends, CRWA staff will support the pilot operations.

- Initial start-up: It is expected that following completion of the pilot equipment set up activities, one week of piloting will be performed to validate operations, establish standard operating procedures (SOPs), and prepare for routine pilot operations.
- Routine Pilot Operations: Pilot operations will be conducted for a period of up to four (4) months and will be focused on validating design criteria, operating parameters, and treatment performance. Engineer will be responsible for routine daily operation during pilot testing.
- Regular communications: Throughout the pilot testing, Engineer will conduct weekly calls with the membrane supplier to review pilot operation, performance and any field issues. It is assumed each call will be 30- minutes in length.

3.4. Pilot Study Report

Upon completion of the pilot testing, Engineer will prepare a draft pilot study report to summarize results and findings. The pilot study report will be developed in accordance with TCEQ requirements. The draft report will be submitted to CRWA for review comments. Upon incorporating review comments, the final report will be submitted to TCEQ for review and approval.

Three (3) pilot testing review meetings will be held over the course of the pilot study to present interim results and findings to CRWA. The review meetings will be held at the end of each pilot testing stage, and it is anticipated that each meeting will be up to two hours in length.

Deliverables: Draft and Final Pilot Study Report; Pilot Testing Review Meeting Agenda and Summary.

Phase 2 Preliminary Design

TASK 4.0 – PRELIMINARY ENGINEERING DESIGN (BASIC SERVICE TASK)

The Engineer shall perform the following tasks as part of the preliminary engineering design of the project.

4.1. Preliminary Engineering Design

The Preliminary Engineering Design Phase will provide a 30% complete design of the project. It will include the Preliminary Engineering Report (PER) and 30% complete level drawings. The work under this phase will include the following items:

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- Develop and finalize design criteria
- Develop facility sizing and produce equipment data
- Perform hydraulic analyses pertinent to membrane system
- Conduct building code analysis
- Develop membrane improvements power loads and produce electrical one-line diagram
- Develop SCADA system architecture
- Develop preliminary specifications table of contents
- Develop preliminary design, including the following discipline level
 - Process and Instrumentation Diagrams (P&IDs) to 50%
 - Process Mechanical to 50%
 - Site Civil, including site, yard piping, grading, and paving plans, to 30%
 - Structural to 20%
 - Architectural to 20%
 - HVAC/Plumbing/Fire Protection to 20%
 - Electrical to 20%
- AACE Class 3 Level Opinion of Probable Construction Cost
- Preliminary Project Construction Schedule

The following subtasks will be performed in developing the Preliminary Engineering Report (PER) to determine the scope for the project to move into the Final Design. Appropriate graphics, charts, diagrams, tables, and drawings will supplement the text to provide a complete working summary document.

4.1.1 Membrane System Evaluations and 30% Drawing Development

Engineer will evaluate membrane and associated subsystem and recommend number and size of unit processes, standby equipment requirements, types of equipment to be used, and facility costs including:

- Membrane feed pumps
- Prefilters/strainers
- Membrane racks
- Backwash pumps
- CIP tank, chemical transfer pumps, and waste handling system
- Air scour blowers
- Compressed air system

Engineer will develop preliminary design drawings for the proposed improvements in accordance with the discipline level as defined above.

Proposed improvements will be designed in compliance with the requirements of applicable laws, codes, and regulations, and applicable design manuals.

4.1.2 Hydraulics

Engineer will evaluate the hydraulics associated with membrane system such that the impact of various flows can be evaluated and structures and piping properly sized. Partial hydraulic grade line drawings will be prepared. Hydraulics analysis will include membrane feed pump and

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strainer hydraulics, CIP pump hydraulics, CIP chemical transfer pump hydraulics, backwash pump hydraulics, and CIP waste pump hydraulics etc.

4.1.3 Discipline Support Activities

As a portion of the Preliminary Engineering Report, the following items will be evaluated and included in the overall report preparation. In general, discipline design considerations will follow the same design philosophy that was established in the original design, unless otherwise directed by CRWA:

- Civil and Site Work – PER will address grading, paving, drainage, stormwater mitigation.
- Structural Design – PER will identify building codes that will apply to the design and develop structural design for expansion of existing building vs new building.
- Architectural Design – PER will address the architectural design of the existing Building expansion and modifications required vs new building. Plan views and representative sections for the buildings will be included in the PER.
- HVAC, Plumbing, and Fire Protection – PER will address the HVAC, plumbing and fire protection requirements for the proposed improvements for building expansion and new building alternatives.
- Electrical Design – PER will discuss the power requirements for the proposed improvements, develop electrical load list and one-line diagrams, and electrical room layout for the existing building expansion and new building options.
- Instrumentation, Control, and SCADA Design – PER will present instrumentation and control philosophy and develop the preliminary process and instrumentation diagrams and SCADA system architecture. Evaluate SCADA HMI and integration for the proposed improvements.

4.1.4 Preliminary Cost Estimates

Engineer will prepare a quantity take-off and develop preliminary opinions of probable construction costs (OPCC) for construction in accordance with AACE Class 3. The cost estimating assumptions and cost summaries will be included in the PER.

4.1.5 Constructability Review and Overall Construction Schedule

Engineer will identify potential construction constraints and develop a construction sequencing and staging plan in order to maintain plant operation during the expansion. Engineer will address constructability concerns and determine the overall construction schedule for the proposed improvements.

4.1.6 Preliminary Engineering Report

Engineer will prepare a PER that will incorporate the above items evaluated in the Preliminary Engineering Design Phase and present the proposed plans in the PER. The PER will include plant design criteria and the proposed list of major equipment, preliminary layouts of facilities,

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structures and buildings, P&IDs, site plan and yard piping layouts, driveways, and electrical facilities.

A draft Table of Contents for this deliverable is as follows:

- Executive Summary
- Section 1 – Introduction and Project Background
- Section 2 – Historical Data Review
- Section 3 – Water Balance and Basis of Design Flow
- Section 4 – Membrane Expansion Alternative Evaluation
- Section 5 - Architectural Design Considerations
- Section 6 – Structural Design Considerations
- Section 7 – HVAC, Plumbing, and Fire Protection
- Section 8 – Electrical Design Considerations
- Section 9 – Instrumentation, Control and SCADA Design
- Section 10 – Civil and Site Work
- Section 11–Construction Schedule and OPCC

Deliverables: Electronic submittal of draft and final Preliminary Engineering Reports, and 30% Level Drawings

4.2. Specific Workshops

Engineer will conduct two workshops during the Preliminary Engineering Design phases with CRWA to develop project direction for various items related to the project. Engineer will provide a summary document following each of the workshops, documenting the outcome and presenting action items to be completed.

4.2.1 Membrane Building Alternative

Two membrane building alternatives will be evaluated, including 1) expanding existing membrane building to accommodate the proposed improvements; 2) constructing a new membrane building for the proposed improvements. The building alternative evaluation workshop will review preliminary layout of each building alternative, site plan, architectural design consideration, structural design requirements, building mechanical, electrical room layout, instrumentation, control and SCADA integration aspects of each alternative. This workshop is anticipated to be no more than two hours in length and will be conducted via Teams in conjunction with one of the Progress Meetings.

Deliverables: Workshop Agenda and Minutes

4.2.2 PER Review Workshop

A review workshop with CRWA will be conducted for the Preliminary Engineering Design phase. This workshop will be held approximately two weeks following submittal of the draft Preliminary Engineering Design deliverable to provide time for CRWA review, and comment collection & compiling. Following their review, CRWA staff will provide written comments to the Engineer. Engineer will then provide a written response to these comments and incorporate revision in the final PER. The review workshop will be approximately 4 hours and will be conducted via Teams.

Deliverables: Workshop Agenda and Review Comment & Response Log

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TASK 5.0 – REGULATORY AGENCY COORDINATION WITH TCEQ AND LOCAL GOVERNMENTAL AUTHORITIES (BASIC SERVICE TASK)

5.1. TCEQ Coordination Meetings

Engineer will coordinate and attend up to two (2) virtual meetings with CRWA and TCEQ regarding the project. Each meeting is anticipated to be one hour in length. Potential topics to cover may include process design criteria, the potential for obtaining exceptions, key regulatory review components, and review workflow process for the proposed improvements.

Deliverables: Meeting agenda and minutes

5.2. Local AHJ Coordination Meetings

Engineer will coordinate and attend up to two (2) virtual meetings with CRWA and local authority having jurisdiction (AHJ) regarding the project. Each meeting is anticipated to be one hour in length. Potential topics to cover may include process design criteria, the potential for obtaining exceptions, key regulatory review components, and review workflow process for the proposed improvements.

Deliverables: Meeting agenda and minutes

5.3. Regulatory Review and Permit Checklist

Engineer will conduct a preliminary assessment to identify project related code and permit requirements, develop a regulatory and permit review checklist to outline deliverable milestones, regulatory and permit review timeline, and proposed schedule for compliance. The project Regulatory and Permit Review Checklist will be included in the PER.

Deliverables: Regulatory and Permit Review Checklist

5.4. PER TCEQ Submission

Engineer will coordinate external regulatory review with TCEQ to ensure compliance with TCEQ rules and regulations. Engineer will submit Preliminary Engineering Report to TCEQ for review. Upon receipt of review comments, Engineer will address and incorporate in the Final PER.

Deliverables: PER and TCEQ Comments and Response Log

TASK 6.0 – TWDB DWSRF FUNDING APPLICATION SUPPORT SERVICES (ADDITIONAL SERVICE TASK)

Engineer will perform the following tasks in support of the project funding application. Since the improvements are anticipated within the existing WTP site, US ACE permit, threatened and endangered species habitat evolution, Archaeological Pedestrian Survey are not included in the following funding services.

6.1. Funding Opportunities Workshop

Engineer will conduct a workshop with CRWA to identify available project funding sources such as TWDB SWIFT, TWDB DWRSF, and EPA WIFIA, review project eligibility, application process, document requirements, and timeline etc. to support the improvements project. The workshop is

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anticipated to be two (2) hours in length.

Deliverables: Workshop Agenda and Meeting Minutes

6.2. Funding Application Assistance

6.2.1 TWDB SWIFT Funding Application and Processing

Prepare an application and necessary exhibits for funding assistance from the Texas Water Development Board (TWDB) through the SWIFT funding mechanism and submit the application by the statutory deadline.

Coordinate with TWDB as necessary to complete the application.

6.2.2 TWDB DWSRF Funding Application and Processing

Prepare an application and necessary exhibits for funding assistance from the Texas Water Development Board (TWDB) through the Drinking Water State Revolving funding mechanism by completing the DWSRF IUP Solicitation Packet – Project Information Form.

Prepare an application and necessary exhibits for funding assistance from the TWDB through the Drinking Water funding mechanism by completing the DWSRF application and supporting exhibits.

Coordinate with TWDB as necessary to complete the application.

6.2.3 A Third Funding Application and Processing

Depending upon recommendation from the funding opportunity workshop, prepare a third application and necessary exhibits for funding assistance from the identify state or federal funding mechanism and submit the application.

Coordinate with funding agency as necessary to complete the application.

6.3. Environmental Review Services for TWDB Funds

Engineer will prepare necessary environmental documents required in support of the funding application, in accordance with National Environmental Policy Act (NEPA) regulations and applicable TWDB guidance. The Environmental Information Document (EID) will be prepared using TWDB-0801 form. The EID will include the project area within the current plant boundaries and an area outside the current fence line where the new 24-inch water line will be routed through. Engineer will coordinate with regulatory agencies, including but not limited to the US Army Corps of Engineering, US Fish & Wildlife Service, Texas Historical Commission, Texas Parks and Wildlife Department, and Department of Agriculture etc. The draft document will be submitted to CRWA for review and comment. Engineer will incorporate the comments in the final document and submit to TWDB.

Engineer will coordinate with CRWA and conduct a Public Meeting as part of the TWDB EID requirements. Engineer will prepare a Public Meeting Notice for CRWA to use and publish in local newspaper 30 days in advance of the meeting. Engineer will prepare meeting materials including sign-in sheet, PowerPoint presentation, and meeting hand-outs. CRWA will be responsible for publishing the Notice in local newspaper and providing a local source for public to view the EID document prior to the meeting.

Upon completion of the Public Meeting, Engineer will include public participation documentation such as publisher's affidavit and a copy of the meeting notice, statement signed by CRWA,

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meeting sign-in sheet, meeting summary, and comments received and responses in the final EID.

Engineer will coordinate and address TWDB comments received to obtain final approval.

Deliverables: Draft and Final EID
Public Meeting Notice
Public Meeting Materials including sign-in sheet, handout (up to 10 copies),
and PowerPoint Presentation
Public Meeting Participation Documentation

6.4. Engineering Feasibility Report for TWDB Funds

Engineer will prepare an Engineering Feasibility Report (EFR) and submit it to TWDB for funding application support. The report will be prepared in accordance with TWDB Guidance Document TWDB-0555 and include the following information: project general description, alternatives, project site conditions, treatment processes and design criteria, alternative methods for project delivery (if applicable), project cost and implement schedule, etc. The EFR will include the project components related to the membrane improvements.

Engineer will use the Preliminary Engineering Report as a basis to develop the EFR. Engineer will submit the draft EFR to CRWA for review and incorporate review comments in the final report.

Engineer will coordinate with TWDB and address TWDB's review comments for final approval.

Deliverables: Draft and Final EFR

6.5. Ongoing Coordination with Funding Agencies and Misc. Supporting Documents

The Engineer will provide ongoing coordination with funding agencies over the duration of the project PER phase and misc. supporting documents and deliverables necessary for the completion of the identified funding applications.

Engineer will coordinate and provide information for funding agency submittals and requests. Engineer will attend no more than two (2) virtual meetings with CRWA and funding agencies regarding the project. Each meeting is anticipated to be one hour in length.

Deliverables: Meeting agenda and minutes

TASK 7.0 – MEMBRANE BUILDING CRITICAL DIMENSION/ELEVATION 3D LASER SCANNING (ADDITIONAL SERVICE TASK)

If PER recommendation is to proceed with expanding the existing building, this task will be required in order to capture critical dimensions and elevations for final design development due to the poor quality of available Record Drawings.

Engineer will perform detailed as-built survey of the interior of the Membrane building using high-definition 3D laser scanning (Terrestrial LIDAR) Trimble 3D Laser scanning systems. Horizontal (NAD83) and Vertical (NAVD88) control will be established and transferred into the building. The High-Definition Survey will capture data with sub-centimeter level accuracy and detail to create a 3D pointcloud

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replicating the as-built conditions. The 3D point cloud will be processed and exported to 2D CAD environment to create a complete CAD drawing of the building's interior infrastructure.

TASK 8.0 – MISCELLANEOUS ADDITIONAL SERVICE TASKS

These items are not part of the basic engineering services and will be added to the scope of services upon written authorization from CRWA. The services provided under this task will be used at CRWA's discretion on an as-needed basis.

7.1. CRWA Board Meetings

Engineer attend CRWA in-person meetings to provide project update and information to the CRWA Board of Managers, Construction Committee, and Board of Trustees over the course of project PER phase. These meetings will occur once a month. It is assumed no more than 27 meetings during the PER phase.

7.2. Feasibility Study for Taste and Odor (T&O) Control

The HC WTP has experienced seasonal fluctuations of earthy/musty T&O which is derived from the presence algal by-products such as methylisoborneol (MIB) and geosmin. There are several potential strategies for T&O control that include the addition of powdered activated carbon (PAC), adsorption using granular activated carbon (GAC) contactors and advanced oxidation processes (AOPs). The AOPs include ozone/hydrogen peroxide oxidation and ultraviolet (UV) light/hydrogen peroxide oxidation. Engineer will conduct a desktop, qualitative assessment of the available strategies.

The Engineer will contract with a specialist laboratory to conduct bench-scale tests that will include:

- Adsorption tests for PAC type, dose and contact time. Up to three kinds of PACs will be tested.
- Rapid small scale column tests (RSSCTs) to determine GAC loading rates, empty bed contact time (EBCT) and replacement frequency. Up to three RSSCTs will be performed.

Bench-scale tests will be conducted by spiking with MIB to simulate the worst-case water quality conditions.

Engineer will use the bench-scale test results and prepare life-cycle costs for each T&O alternative. From the desktop assessment findings, bench-scale test results and life-cycle cost estimates, the Engineer, in consultation with CRWA staff, will identify the best strategies for the full-scale plant consideration.

Deliverable: Tech Memo Summarizing Findings from Feasibility Study

7.3. HC WTP Misc. Enhancement

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Per discussion with CRWA, it is desired to enhance current design of splitter box and chemical mixing mechanism in the Improvements project to enhance chemical mixing efficiency. Engineer will review the current design and propose modifications for design revisions.

In addition, CRWA staff expressed maintenance concerns with the proposed decant ponds. A better solution is desired by CRWA staff for plant residual handling. Engineer will perform a preliminary engineering design to look at alternatives for improving plant residual handling process. Recommendations can be incorporated in the final design of the membrane improvements project.

Deliverable: Tech Memo Summarizing Residual Handling Improvements

TASK 9.0 – OTHER SERVICE TASKS, CLARIFICATIONS AND EXCLUSIONS

Other service tasks will be negotiated with CRWA as needed, including additional studies and investigation as required to support recommended solution and/or as required to address system which may become affected as a result of the proposed work but not originally envisioned or as added by CRWA. These other services may include the following and will be authorized by CRWA in writing for an additional fee as agreed upon by CRWA and the Engineer:

1. Any additional meetings, outside of those listed herein
2. Pilot study analytical laboratory testing
3. Pilot plant construction and pilot equipment
4. Pilot testing chemicals
5. Hydraulic transient analysis
6. Topographic survey performed in the HC WTP Improvements project will be used. Any additional survey that is needed as identified during the PER phase will be performed in the final design.
7. Any off-site survey work outside the plant fence line
8. Subsurface utility engineering
9. Geotechnical Report performed in the HC WTP Improvements project will be used. Any additional geotechnical borings and laboratory testing that may be needed as identified during the PER phase will be performed in the final design.
10. Phase 1 and Phase 2 environmental site assessment (ESA)
11. USACE Permitting
12. Archeological investigation Services
13. ACI-ADI review for ADA compliance (anticipated for the final design phase)
14. Computational fluid dynamics (CFD) modeling
15. Electrical studies such as short circuit, coordination, motor starting, and arc flash studies (anticipated for the final design phase)
16. Plant-wide security system design
17. FAA permitting
18. Physical laboratory scale modeling
19. Drawings will be developed in 2D version of AutoCAD
20. Site landscaping

CRWA HC WTP Membrane Improvements
Preliminary Engineering Design Phase
Level of Efforts Fee Estimate

[illegible]

CRWA HC WTP Membrane Improvements
Preliminary Engineering Design Phase
Level of Efforts Fee Estimate[illegible]

CRWA HC WTP Preliminary Engineering Report																																	
Gupta & Associates, Inc.																																	
TASK SUMMARY - BASIC SERVICES																																	
Task	Principal			Project Manager			Engineer - Senior			Engineer			Project Engineer			CAD Tech - Senior			CAD Tech			Accountant			Admin			Subtotal		DDC		TOTAL	
	Rate	Hours	Cost	Rate	Hours	Cost	Rate	Hours	Cost	Rate	Hours	Cost	Rate	Hours	Cost	Rate	Hours	Cost	Rate	Hours	Cost	Rate	Hours	Cost	Rate	Hours	Cost	Rate	Hours	Cost			
1.0 Project Management/Coordination	\$	0	\$	289	7	\$	1,953	1	\$	257	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	3,038			
1.1 Project Management/Coordination	\$	0	\$	289	6	\$	1,674	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	1,674			
1.2 Invoice Processing	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
1.3	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
1.4 Meetings	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
1.5 Pre-Design Kickoff Meeting	\$	0	\$	289	1	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	289			
1.6 Design Progress Meetings (with Owner)	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
1.7	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
1.8	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
1.9	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
1.10	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.0 Preliminary Engineering Report	\$	0	\$	289	17	\$	4,743	9	\$	2,313	72	\$	14,040	174	\$	29,058	12	\$	1,476	50	\$	5,050	0	\$	0	0	\$	0	\$	0	\$	59,879	
2.1 Initial Site Visit and Investigation	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.2 Prepare Draft Tech Memo	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.3 Prepare 30% Drawings	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.4 Submit Draft Tech Memo	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.5 Prepare Final Tech Memo	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.6 Submit Final Tech Memo	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.7 Bi-Weekly Design Team Coord Meetings (Report)	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
Miscellaneous	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.15 Task 2: Membrane Alternative Eval	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.16 Task 3: Membrane Pilot Study	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.17	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.18	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.19 Task 8: Additional Services	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.20	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
2.21	\$	0	\$	289	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	0	\$	0	\$	0			
	\$	0	\$	289	24	\$	6,696	10	\$	2,570	72	\$	14,040	174	\$	29,058	12	\$	1,476	50	\$	5,050	0	\$	0	0	\$	0	\$	0	\$	62,915	



August 10, 2023

Yue Sun, PE
Water Treatment Practice Leader/ Sr. Project Manager
Ardurra Group, LLC
3115 Allen Pkwy Suite 300
Houston, TX 77019

Dear Ms. Sun,

Thank you for the opportunity for KWH Engineering to provide HVAC engineering consulting service for the Canyon Regional Water Authority Hays Caldwell WTP Nanofiltration System Improvements project. We are pleased to propose the followings for our scope and fee.

Scope:

Preliminary Design Phase

- Assess the HVAC/Plumbing/Fire Protection requirements for two (2) improvement alternatives for the membrane building improvements, including:
 - 1) Expansion of the existing membrane building
 - 2) Construction of a new membrane building to house new equipment
- The HVAC/Fire Protection tasks include project kickoff, information/data collection, code review and analysis, confirmation of design criteria, site visit, development of PDR, OPCC, and development 2D schematic layout (20% level design), etc.

Fee:

Project Management:	\$720
Preliminary Engineering Design:	\$16,920
Total (lump sum):	<u>\$17,640</u>

Assumption:

One site visit (conducted on July 5, 2023). Any additional site visits will incur an extra fee upon request.

Thank you very much! We are excited and look forward to working with you on this project!

Sincerely,

A handwritten signature in blue ink that reads 'Sophi Feng'.

Sophi Feng, PE

Manager

KWH Engineering LLC

CRWA





August 26, 2023

Mr. John M. Kaufman
General Manager
Canyon Regional Water Authority
850 Lakeside Pass
New Braunfels, Texas 78130-8233

Regarding: Hays Caldwell Water Treatment Plant (HC WTP) Membrane Improvements
Proposal to Provide Professional Engineering Services for Preliminary Engineering Design
& Report (Rev 1)

Dear Mr. Kaufman:

Ardurra Group, Inc. is excited to have the opportunity to submit this proposal to the Canyon Regional Water Authority (CRWA) to provide professional engineering services for preliminary engineering design and development of a preliminary engineering report (PER) for the CRWA HC WTP Membrane Improvements project.

Please find the attached Detailed Scope of Services description, level of effort fee estimate, and anticipated project schedule.

Based on the scope of services described in Attachment A, we propose to complete the work in the following amount:

Task	BASIC SERVICE TASKS	ADDITIONAL SERVICE TASKS	Notes
Task 1.0 - GENERAL PROJECT MANAGEMENT AND QUALITY CONTROL	\$75,728.00		
Task 2.0 - MEMBRANE ALTERNATIVE EVALUATION	\$60,252.00		Opportunities available for LOE optimization, pending final direction from CRWA
Task 3.0 - MEMBRANE PILOT STUDY	\$179,603.00		Opportunities available for LOE optimization, pending final direction from CRWA
Task 4.0 - PRELIMINARY ENGINEERING DESIGN	\$402,390.50		
Task 5.0 - REGULATORY AGENCY COORDINATION WITH TCEQ	\$28,581.00		

Task 6.0 - TWDB DWSRF FUNDING APPLICATION SUPPORT SERVICES		\$200,802.00	Required if CRWA would like to pursue State or Federal funds opportunities
Task 7.0 - MEMBRANE BUILDING CRITICAL DIMENSIONS/ELEVATIONS 3D LASER SCANNING		\$35,595.00	Required only if PER recommendation is to expand existing membrane bldg.
Task 8.0 - MISC. ADDITIONAL SERVICE TASKS	\$23,389.00	\$72,635.00	
TOTAL	\$769,943.50	\$309,032.00	

Per discussion at the Scope of Work Discussion meeting on 8/25/2023 with CRWA Staff and its participant entities, it is recommended that the following tasks be authorized first in a lump sum amount of \$122,848.00, with the remaining tasks be authorized at a later date.

Task	BASIC SERVICE TASKS	ADDITIONAL SERVICE TASKS	TOTAL
Task 1.0 - GENERAL PROJECT MANAGEMENT AND QUALITY CONTROL	\$75,728.00		\$75,728.00
Task 2.0 - MEMBRANE ALTERNATIVE EVALUATION Task 2.1 Data Collection and Review	\$15,040.00		\$15,040.00
Task 3.0 - MEMBRANE PILOT STUDY Task 3.1 Pilot Testing Protocol	\$19,760.00		\$19,760.00
Task 6.0 - TWDB DWSRF FUNDING APPLICATION SUPPORT SERVICES Task 6.1 Funding Opportunities Workshop		\$12,320.00	\$12,320.00
TOTAL	\$110,528.00	\$12,320.00	\$122,848.00

We look forward to beginning work on this important project and appreciate the opportunity to continue serving CRWA. Should you have any questions or need additional information, please feel free to contact me via email at ysun@ardurra.com, or via phone at 713.208.9463.

Respectfully,



Yue Sun, PE, BCEE
Group Leader / Project Director

Attachment A / Detailed Scope of Engineering Services

SCOPE OF SERVICES FOR CANYON REGIONAL WATER AUTHORITY HAYS CALDWELL WATER TREATMENT PLANT NANOFILTRATION SYSTEM IMPROVEMENTS PRELIMINARY ENGINEERING DESIGN PHASE

GENERAL

Canyon Regional Water Authority (CRWA) Hays Caldwell Water Treatment Plant (HC WTP) provides treated water to Maxwell Water Supply Corporation, Martindale Water Supply Corporation, Crystal Clear Special Utility District, and County Line Specific Utility District. Following planned capacity improvements, treated water will also be pumped to the city of San Marcos. The plant is currently rated for 3.44 MGD and is being upgraded to a treated flow capacity of 6 MGD, with the exception of the existing prefilters and membrane filtration system. The existing membrane system is Koch Targa II membrane filters which are failing and no longer manufactured. The purpose of this project is to upgrade the existing prefilter system and replace the existing Koch Targa II membranes. The replacement membranes will need to provide a production capacity of 6 MGD with a N+1 configuration.

The general scope of work includes preliminary engineering design of the following components based on a site visit and scoping meeting conducted on July 5, 2023:

- Demolition of existing membrane prefilters, membrane racks, and all ancillary components inside the existing membrane building and replacement with new membranes and associated subsystems and components such as membrane feed pumps, prefilters/strainers, backwash pumps, air scour blowers & compressors, clean-in-place system (CIP tank, CIP pumps, CIP chemical transfer pumps, and CIP waste handling equipment) and associated piping, valves, and actuators etc.
- Up to two (2) improvement alternatives will be evaluated for the membrane building improvements. Potential alternatives include the following and will be refined during the preliminary engineering evaluation: 1) expansion of the existing membrane building to provide additional space to house new equipment; 2) construction of a new membrane building to house new equipment.
- Associated architectural, structural, HVAC plumbing and fire protection, electrical, instrumentation control SCADA, and site civil work for the proposed improvements.

Upon receipt of notice to proceed, Engineer shall conduct alternative evaluation and development studies and perform preliminary engineering design service. Preparation of final design construction contract documents, assistance during bidding phase, engineering services during construction, commissioning and startup services, and application engineering services, will be included in future contract amendments.

Attachment A / Detailed Scope of Engineering Services

SCOPE OF WORK

The scope of work presented below describes the base level of services for this project by project task. Unless noted otherwise, all deliverables will be electronic PDF.

TASK 1.0 – PROJECT MANAGEMENT AND QUALITY ASSURANCE (BASIC SERVICE TASK)

1.1. Project Work Plan

Engineer will prepare a written project work plan that outlines the project scope and establishes procedures and protocol for executing the project. The project work plan will include: the scope of work; schedule; organizational structure; communications plan; document management procedures; and quality management procedures. The project work plan will be dynamic in nature and therefore periodically updated as required; action items and decisions will be tracked in an Action Item List and Decision Log.

Deliverables: Project Work Plan

1.2. Project Progress Meetings

Engineer will conduct an initial kickoff meeting with CRWA and its participant entities to introduce project team members, establish protocol and lines of communication, review project goals and objectives, gather all available documents pertinent to the project, and review the scope of work, and schedule.

Monthly progress meetings will be held during the course of the project with the CRWA staff and its participant entities to discuss aspects of the project tasks presently underway, review progress, project schedule, and upcoming issues. These meetings will generally be about two hours in duration. The appropriate Engineering team members shall attend the meetings to discuss pertinent issues. Up to four (4) progress meetings are planned for this Preliminary Engineering Phase of the project. Engineer will prepare draft meeting minutes within seven business days to submit to CRWA for review and distribution to its participant entities. Final minutes will be issued after incorporating review comments.

All meetings will be held via Teams.

Deliverables: Meeting agenda and minutes

1.3. Project Team Coordination

Engineer will conduct regular coordination meetings with design team and subconsultants to coordinate design tasks, review all project elements, to facilitate development of preliminary engineering design. Up to six (6) internal team coordination meetings are planned for the Preliminary Engineering Phase of the project.

1.4. Quality Assurance/Quality Control

Engineer will perform quality assurance/quality control procedures during the project phase. These procedures will include a technical review of interim deliverables by senior technical advisors who are not directly involved with the project. The technical review will provide comments and suggestions concerning the various project deliverables for incorporation prior to

Attachment A / Detailed Scope of Engineering Services

submitting to CRWA for review and distribution to its participant entities. A half-day internal review meeting will be conducted for the Draft Preliminary Engineering Report to discuss technical review comments.

Deliverables: Internal documentation of technical reviews and response logs

1.5. Project Monthly Progress Report and Invoices

Engineer will track and update the budget, schedule, progress of work, and potential changes to the scope of work. Engineer will provide a project status report and submit it with monthly invoice. The project status report will include summary of work completed to date, work planned for upcoming month, and schedule update as needed.

Deliverables: Project status reports and monthly invoices

Phase 1 Conceptual Design /Basis of Design Technical Memorandum

TASK 2.0 – MEMBRANE ALTERNATIVE EVALUATION (BASIC SERVICE TASK)

2.1. Data Collection and Review

Engineer will obtain and review available historical water quality data, plant operation data, operation reports, and other pertinent records, including but not limited to:

- Plant flows for last 5 years
- Available water quality data throughout treatment processes for last 5 years
- Plant disinfection CT study
- Electrical power billing record for last 5 years
- Any improvement projects and study reports since the commission of the plant

Engineer will prepare a data request list and review with CRWA at the Kick-off meeting. It is assumed data requested will be provided to the Engineer in an electronic format. Upon receiving the data, the Engineer will review, analyze, and perform a water balance analysis to develop the basis of design flow and hydraulic loading for the membrane improvements.

During the course of the project Engineer may identify other pertinent documents such as existing equipment O&M manuals and will make a request to CRWA.

2.2. Alternative Development and Conceptual Design

Under Phase 1, Engineer will evaluate membrane alternatives for the improvements. Engineer will utilize historical water quality data, full-scale membrane operation and performance data, and previous available pilot study report and studies to develop a process flow diagram, preliminary design parameters, conceptual equipment sizing and layout, planning level cost estimates in the alternative evaluation. Up to three (3) membrane systems (polymeric and ceramic) will be included in this evaluation.

Each of the three alternatives will be conceptually developed in sufficient details to conduct a present worth cost analysis.

Deliverables: Basis of Design Tech Memo Presenting Membrane Conceptual Design and Evaluation

Attachment A / Detailed Scope of Engineering Services

2.3. Alternative Evaluation

Engineer will evaluate membrane alternatives using criteria developed under Workshop 1 as described below. Engineer will develop conceptual level construction and O&M costs and non-cost screening criteria for each of the alternatives. Engineer will prepare a Technical Memorandum that documents alternative development, presents the evaluations, and recommends proposed improvement for pilot testing. Engineer will recommend up to two (2) membrane systems that best meet project goals for subsequent pilot study.

Deliverables: Basis of Design Tech Memo Presenting Membrane Conceptual Design and Evaluation

2.4. Workshops

Engineer will conduct a series of workshops during this phase with CRWA and its participant entities. Appropriate staff from Ardurra team, experienced in the individual topics to be covered at the workshops, will be available as needed to participate in each workshop. Engineer will provide a summary following each of the workshops, documenting the outcome and presenting action items to be completed.

- **Workshop 1 –Membrane Alternative Development.** A 2-hour workshop will be conducted to discuss alternative membrane technologies that may be evaluated for the membrane conceptual evaluation. The workshop will be conducted in conjunction with one of the Progress Meetings.

Both cost and non-cost evaluation criteria will be developed. The workshop will be conducted after historical facility operational and performance data have been gathered and analyzed. An example of evaluation criteria is provided in Table 1. This will be further refined with CRWA and its participant entities during the workshop.

CRWA and its participant entities will provide primary input as to the relative importance or weighting of the criteria. Subsequent Evaluations will be performed for the alternatives that are selected and agreed upon by CRWA and its participant entities.

Table 1 – Alternative Evaluation Criteria

	Evaluation Criteria	Weight
Cost	Capital Cost	TBD
	O&M Cost	TBD
	Life Cycle Costs	TBD
Non-Cost	Operational Flexibility and Complexity	TBD
	Maintenance Requirements	TBD
	Site Impacts & Expandability	TBD
	Ease of Implementation and Constructability	TBD

Attachment A / Detailed Scope of Engineering Services

	Impacts on Water Quality	TBD
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Deliverables: Workshop agenda and summary.

- **Workshop 2 – Alternative Ranking and Selection.** A 2-hour workshop will be conducted to discuss the membrane alternative evaluations and to conduct an alternative matrix analysis that ranks the alternatives based on weighted cost and non-cost criteria. The workshop will be conducted after alternatives evaluation and conceptual design is complete. Up to two (2) membrane technologies will be recommended for subsequent membrane pilot study. The workshop will be conducted in conjunction with one of the Progress Meetings.

Deliverables: Workshop agenda and summary.

TASK 3.0 – MEMBRANE PILOT STUDY (BASIC SERVICE TASK)

Following selection of membrane alternatives, a membrane pilot test will be conducted to develop full-scale design criteria and obtain regulatory approval from TCEQ. The pilot test will be conducted on the selected membrane system(s).

3.1. Pilot Testing Protocol

Engineer will develop a pilot testing plan that will be a comprehensive guide to the activities to be undertaken during the pilot phase investigations. The pilot testing protocols will outline and address the following:

- Objectives and goals.
- State requirements for membrane pilot testing.
- Raw water quality and treatment goals.
- Pilot layout, design criteria, ancillary requirements.
- Schedule.
- Testing procedures and description of operations.
- Testing matrix outlining the conditions, flows, loadings, duration, runs, and other relevant information for each proposed testing series.
- Water quality sampling, testing, and monitoring. It is assumed that CRWA will pay for laboratory testing. Analytical testing can be handled either via their in-house or contract testing laboratory. Engineer will assist to identify certified laboratories.
- Quality Assurance/Quality Control (QA/QC) procedures.
- Roles, responsibilities, and communications.
- Data collection, processing and reporting.

The Pilot testing protocol will be developed following TCEQ guidance for membrane pilot testing. The pilot study protocol will be submitted to CRWA for distribution to its participant entities for review comments. Upon incorporating review comments, the final test protocol will be submitted to TCEQ and comments will be incorporated into the Final Protocol prior to implementation.

Engineer will coordinate with membrane suppliers and obtain pilot equipment data (dimensional drawings, design loading, hydraulics, analyzers and instruments, power requirements, etc.) and

Attachment A / Detailed Scope of Engineering Services

discuss the approved Pilot Testing Protocol with the membrane system supplier. This is to ensure that the supplier understands pilot testing requirements, data monitoring, and reporting, to meet expectation for subsequent pilot study report submittal.

Deliverables: Draft and Final Pilot Study Protocol.

3.2. Pilot Plant Facilities

The pilot plant will consist of membrane module pilot skids from the membrane system supplier(s), to mimic the full-scale treatment process as proposed for the improvements.

Pilot Facilities Design Document Development: Engineer will develop design documents of the pilot facilities for inclusion in the membrane pilot protocol. The documents will include:

- One line drawing indicating electrical supply and feed requirements.
- Process flow schematics indicating the arrangement of components, interconnection pipe sizes, valves & fittings, and other information.
- Raw water supply general layout drawings.
- Disposal of treated water, waste backwash water, chemical cleaning waste after neutralization.
- General plan view showing arrangement of equipment and key components.

Engineer will also assist to identify chemical suppliers that would be required for the pilot testing, estimated chemical quantities and obtained chemical safety handling procedures. It is assumed that pilot testing chemicals will be paid for by CRWA.

Pilot Facilities Installation and Start-up Assistance: The membrane system supplier is responsible for procuring pilot equipment in accordance with the membrane pilot facility design document. Construction of the pilot facilities, installation of the equipment, and demolition of the pilot facilities will be handled by the membrane system supplier. Shipping and unloading of the pilot equipment shall also be handled by the membrane system supplier. Engineer will coordinate delivery schedule with CRWA.

Engineer will make four (4) site visits (up to 8 hours each) to oversee construction of the pilot facilities and installation of pilot testing equipment. Engineer will perform a final walkthrough to make sure pilot setup/construction and equipment installation are in accordance with the layouts prepared. This level of effort assumes two (2) personnel for each site visit.

Engineer will participate in start-up and confirm that systems are operational. This level of effort assumes two (2) personnel in the field for a total of four site visits (8 hours each) to complete installation oversight, final walkthrough, and start-up of the pilot.

3.3. Pilot Operations

Engineer will provide personnel to maintain routine operation of the pilot, monitor and collect data required from the pilot equipment in accordance with the pilot sampling, monitoring, and analysis plan outlined in the Pilot Testing Protocol. Engineer will collect field water samples (raw, membrane feed, membrane filtrate, waste backwash water, etc.), perform onsite field testing at either HC WTP or LD WTP lab, and coordinate required analyses by certified laboratories. Engineer

Attachment A / Detailed Scope of Engineering Services

will be responsible for coordinating with testing laboratory for delivery of sample bottles, chain-of-custody, and sample shipment. Engineer will document daily operation logs, event logs, field grab sample results, field issues and observations etc.

Engineer will provide one half-time staff (eight hours per day on Mondays and Wednesdays, and 4 hours per day on Fridays) to maintain operations and collect the data required from the pilot equipment. For Tuesdays, Thursdays and weekends, CRWA staff will support the pilot operations.

- Initial start-up: It is expected that following completion of the pilot equipment set up activities, one week of piloting will be performed to validate operations, establish standard operating procedures (SOPs), and prepare for routine pilot operations.
- Routine Pilot Operations: Pilot operations will be conducted for a period of up to four (4) months and will be focused on validating design criteria, operating parameters, and treatment performance. Engineer will be responsible for routine daily operation during pilot testing.
- Regular communications: Throughout the pilot testing, Engineer will conduct weekly calls with the membrane supplier to review pilot operation, performance and any field issues. It is assumed each call will be 30- minutes in length.

3.4. Pilot Study Report

Upon completion of the pilot testing, Engineer will prepare a draft pilot study report to summarize results and findings. The pilot study report will be developed in accordance with TCEQ requirements. The draft report will be submitted to CRWA for review and distribution to its participant entities for comments. Upon incorporating review comments, the final report will be submitted to TCEQ for review and approval.

Three (3) pilot testing review meetings will be held over the course of the pilot study to present interim results and findings to CRWA and its participant entities. The review meetings will be held at the end of each pilot testing stage, and it is anticipated that each meeting will be up to two hours in length.

Deliverables: Draft and Final Pilot Study Report; Pilot Testing Review Meeting Agenda and Summary.

Phase 2 Preliminary Design

TASK 4.0 – PRELIMINARY ENGINEERING DESIGN (BASIC SERVICE TASK)

The Engineer shall perform the following tasks as part of the preliminary engineering design of the project.

4.1. Preliminary Engineering Design

The Preliminary Engineering Design Phase will provide a 30% complete design of the project. It will include the Preliminary Engineering Report (PER) and 30% complete level drawings. The work under this phase will include the following items:

- Develop and finalize design criteria

Attachment A / Detailed Scope of Engineering Services

- Develop facility sizing and produce equipment data
- Perform hydraulic analyses pertinent to membrane system
- Conduct building code analysis
- Develop membrane improvements power loads and produce electrical one-line diagram
- Develop SCADA system architecture
- Develop preliminary specifications table of contents
- Develop preliminary design, including the following discipline level
 - Process and Instrumentation Diagrams (P&IDs) to 50%
 - Process Mechanical to 50%
 - Site Civil, including site, yard piping, grading, and paving plans, to 30%
 - Structural to 20%
 - Architectural to 20%
 - HVAC/Plumbing/Fire Protection to 20%
 - Electrical to 20%
- AACE Class 3 Level Opinion of Probable Construction Cost
- Preliminary Project Construction Schedule

The following subtasks will be performed in developing the Preliminary Engineering Report (PER) to determine the scope for the project to move into the Final Design. Appropriate graphics, charts, diagrams, tables, and drawings will supplement the text to provide a complete working summary document.

4.1.1 Membrane System Evaluations and 30% Drawing Development

Engineer will evaluate membrane and associated subsystem and recommend number and size of unit processes, standby equipment requirements, types of equipment to be used, and facility costs including:

- Membrane feed pumps
- Prefilters/strainers
- Membrane racks
- Backwash pumps
- CIP tank, chemical transfer pumps, and waste handling system
- Air scour blowers
- Compressed air system

Engineer will develop preliminary design drawings for the proposed improvements in accordance with the discipline level as defined above.

Proposed improvements will be designed in compliance with the requirements of applicable laws, codes, and regulations, and applicable design manuals.

4.1.2 Hydraulics

Engineer will evaluate the hydraulics associated with membrane system such that the impact of various flows can be evaluated and structures and piping properly sized. Partial hydraulic grade line drawings will be prepared. Hydraulics analysis will include membrane feed pump and strainer hydraulics, CIP pump hydraulics, CIP chemical transfer pump hydraulics, backwash pump hydraulics, and CIP waste pump hydraulics etc.

Attachment A / Detailed Scope of Engineering Services

4.1.3 Discipline Support Activities

As a portion of the Preliminary Engineering Report, the following items will be evaluated and included in the overall report preparation. In general, discipline design considerations will follow the same design philosophy that was established in the original design, unless otherwise directed by CRWA:

- Civil and Site Work – PER will address grading, paving, drainage, stormwater mitigation.
- Structural Design – PER will identify building codes that will apply to the design and develop structural design for expansion of existing building vs new building.
- Architectural Design– PER will address the architectural design of the existing Building expansion and modifications required vs new building. Plan views and representative sections for the buildings will be included in the PER.
- HVAC, Plumbing, and Fire Protection – PER will address the HVAC, plumbing and fire protection requirements for the proposed improvements for building expansion and new building alternatives.
- Electrical Design – PER will discuss the power requirements for the proposed improvements, develop electrical load list and one-line diagrams, and electrical room layout for the existing building expansion and new building options.
- Instrumentation, Control, and SCADA Design – PER will present instrumentation and control philosophy and develop the preliminary process and instrumentation diagrams and SCADA system architecture. Evaluate SCADA HMI and integration for the proposed improvements.

4.1.4 Preliminary Cost Estimates

Engineer will prepare a quantity take-off and develop preliminary opinions of probable construction costs (OPCC) for construction in accordance with AACE Class 3. The cost estimating assumptions and cost summaries will be included in the PER.

4.1.5 Constructability Review and Overall Construction Schedule

Engineer will identify potential construction constraints and develop a construction sequencing and staging plan in order to maintain plant operation during the expansion. Engineer will address constructability concerns and determine the overall construction schedule for the proposed improvements.

4.1.6 Preliminary Engineering Report

Engineer will prepare a PER that will incorporate the above items evaluated in the Preliminary Engineering Design Phase and present the proposed plans in the PER. The PER will include plant design criteria and the proposed list of major equipment, preliminary layouts of facilities, structures and buildings, P&IDs, site plan and yard piping layouts, driveways, and electrical facilities.

A draft Table of Contents for this deliverable is as follows:

Attachment A / Detailed Scope of Engineering Services

- Executive Summary
- Section 1 – Introduction and Project Background
- Section 2 – Historical Data Review
- Section 3 – Water Balance and Basis of Design Flow
- Section 4 – Membrane Expansion Alternative Evaluation
- Section 5 – Architectural Design Considerations
- Section 6 – Structural Design Considerations
- Section 7 – HVAC, Plumbing, and Fire Protection
- Section 8 – Electrical Design Considerations
- Section 9 – Instrumentation, Control and SCADA Design
- Section 10 – Civil and Site Work
- Section 11 – Construction Schedule and OPCC

Deliverables: Electronic submittal of draft and final Preliminary Engineering Reports, and 30% Level Drawings

4.2. Specific Workshops

Engineer will conduct two workshops during the Preliminary Engineering Design phases with CRWA and its participant entities to develop project direction for various items related to the project. Engineer will provide a summary document following each of the workshops, documenting the outcome and presenting action items to be completed.

4.2.1 Membrane Building Alternative

Two membrane building alternatives will be evaluated, including 1) expanding existing membrane building to accommodate the proposed improvements; 2) constructing a new membrane building for the proposed improvements. The building alternative evaluation workshop will review preliminary layout of each building alternative, site plan, architectural design consideration, structural design requirements, building mechanical, electrical room layout, instrumentation, control and SCADA integration aspects of each alternative. This workshop is anticipated to be no more than two hours in length and will be conducted via Teams in conjunction with one of the Progress Meetings.

Deliverables: Workshop Agenda and Minutes

4.2.2 PER Review Workshop

A review workshop with CRWA and its participant entities will be conducted for the Preliminary Engineering Design phase. This workshop will be held approximately two weeks following submittal of the draft Preliminary Engineering Design deliverable to provide time for CRWA and its participant entities review, and comment collection & compiling. Following their review, CRWA and its participant entities will provide written comments to the Engineer. Engineer will then provide a written response to these comments and incorporate revision in the final PER. The review workshop will be approximately 4 hours and will be conducted via Teams.

Deliverables: Workshop Agenda and Review Comment & Response Log

TASK 5.0 – REGULATORY AGENCY COORDINATION WITH TCEQ AND LOCAL GOVERNMENTAL AUTHORITIES (BASIC SERVICE TASK)

Attachment A / Detailed Scope of Engineering Services

5.1. TCEQ Coordination Meetings

Engineer will coordinate and attend up to two (2) virtual meetings with TCEQ regarding the project. Each meeting is anticipated to be one hour in length. Potential topics to cover may include process design criteria, the potential for obtaining exceptions, key regulatory review components, and review workflow process for the proposed improvements.

Deliverables: Meeting agenda and minutes

5.2. Local AHJ Coordination Meetings

Engineer will coordinate and attend up to two (2) virtual meetings with local authority having jurisdiction (AHJ) regarding the project. Each meeting is anticipated to be one hour in length. Potential topics to cover may include process design criteria, the potential for obtaining exceptions, key regulatory review components, and review workflow process for the proposed improvements.

Deliverables: Meeting agenda and minutes

5.3. Regulatory Review and Permit Checklist

Engineer will conduct a preliminary assessment to identify project related code and permit requirements, develop a regulatory and permit review checklist to outline deliverable milestones, regulatory and permit review timeline, and proposed schedule for compliance. The project Regulatory and Permit Review Checklist will be included in the PER.

Deliverables: Regulatory and Permit Review Checklist

5.4. PER TCEQ Submission

Engineer will coordinate external regulatory review with TCEQ to ensure compliance with TCEQ rules and regulations. Engineer will submit Preliminary Engineering Report to TCEQ for review. Upon receipt of review comments, Engineer will address and incorporate in the Final PER.

Deliverables: PER and TCEQ Comments and Response Log

TASK 6.0 – TWDB DWSRF FUNDING APPLICATION SUPPORT SERVICES (ADDITIONAL SERVICE TASK)

Engineer will perform the following tasks in support of the project funding application. Since the improvements are anticipated within the existing WTP site, US ACE permit, threatened and endangered species habitat evolution, Archaeological Pedestrian Survey are not included in the following funding services.

6.1. Funding Opportunities Workshop

Engineer will conduct a workshop with CRWA and its participant entities to identify available project funding sources such as TWDB SWIFT, TWDB DWRSF, and EPA WIFIA, review project eligibility, application process, document requirements, and timeline etc. to support the improvements project. The workshop is anticipated to be two (2) hours in length.

Deliverables: Workshop Agenda and Meeting Minutes

Attachment A / Detailed Scope of Engineering Services

6.2. Funding Application Assistance

6.2.1 TWDB SWIFT Funding Application and Processing

Prepare an application and necessary exhibits for funding assistance from the Texas Water Development Board (TWDB) through the SWIFT funding mechanism and submit the application by the statutory deadline.

Coordinate with TWDB as necessary to complete the application.

6.2.2 TWDB DWSRF Funding Application and Processing

Prepare an application and necessary exhibits for funding assistance from the Texas Water Development Board (TWDB) through the Drinking Water State Revolving funding mechanism by completing the DWSRF IUP Solicitation Packet – Project Information Form.

Prepare an application and necessary exhibits for funding assistance from the TWDB through the Drinking Water funding mechanism by completing the DWSRF application and supporting exhibits.

Coordinate with TWDB as necessary to complete the application.

6.2.3 A Third Funding Application and Processing

Depending upon recommendation from the funding opportunity workshop, prepare a third application and necessary exhibits for funding assistance from the identify state or federal funding mechanism and submit the application.

Coordinate with funding agency as necessary to complete the application.

6.3. Environmental Review Services for TWDB Funds

Engineer will prepare necessary environmental documents required in support of the funding application, in accordance with National Environmental Policy Act (NEPA) regulations and applicable TWDB guidance. The Environmental Information Document (EID) will be prepared using TWDB-0801 form. The EID will include the project area within the current plant boundaries and an area outside the current fence line where the new 24-inch water line will be routed through. Engineer will coordinate with regulatory agencies, including but not limited to the US Army Corps of Engineering, US Fish & Wildlife Service, Texas Historical Commission, Texas Parks and Wildlife Department, and Department of Agriculture etc. The draft document will be submitted to CRWA for review, distribution to its participant entities, and comment. Engineer will incorporate the comments in the final document and submit to TWDB.

Engineer will coordinate with CRWA and conduct a Public Meeting as part of the TWDB EID requirements. Engineer will prepare a Public Meeting Notice for CRWA to use and publish in local newspaper 30 days in advance of the meeting. Engineer will prepare meeting materials including sign-in sheet, PowerPoint presentation, and meeting hand-outs. CRWA will be responsible for publishing the Notice in local newspaper and providing a local source for public to view the EID document prior to the meeting.

Upon completion of the Public Meeting, Engineer will include public participation documentation such as publisher's affidavit and a copy of the meeting notice, statement signed by CRWA, meeting sign-in sheet, meeting summary, and comments received and responses in the final EID.

Engineer will coordinate and address TWDB comments received to obtain final approval.

Attachment A / Detailed Scope of Engineering Services

Deliverables: Draft and Final EID
Public Meeting Notice
Public Meeting Materials including sign-in sheet, handout (up to 10 copies),
and PowerPoint Presentation
Public Meeting Participation Documentation

6.4. Engineering Feasibility Report for TWDB Funds

Engineer will prepare an Engineering Feasibility Report (EFR) and submit it to TWDB for funding application support. The report will be prepared in accordance with TWDB Guidance Document TWDB-0555 and include the following information: project general description, alternatives, project site conditions, treatment processes and design criteria, alternative methods for project delivery (if applicable), project cost and implement schedule, etc. The EFR will include the project components related to the membrane improvements.

Engineer will use the Preliminary Engineering Report as a basis to develop the EFR. Engineer will submit the draft EFR to CRWA for distribution to its participant entities for review, and Engineer will incorporate review comments in the final report.

Engineer will coordinate with TWDB and address TWDB's review comments for final approval.

Deliverables: Draft and Final EFR

6.5. Ongoing Coordination with Funding Agencies and Misc. Supporting Documents

The Engineer will provide ongoing coordination with funding agencies over the duration of the project PER phase and misc. supporting documents and deliverables necessary for the completion of the identified funding applications.

Engineer will coordinate and provide information for funding agency submittals and requests. Engineer will attend no more than two (2) virtual meetings with CRWA and its participant entities, and funding agencies regarding the project. Each meeting is anticipated to be one hour in length.

Deliverables: Meeting agenda and minutes

TASK 7.0 – MEMBRANE BUILDING CRITICAL DIMENSION/ELEVATION 3D LASER SCANNING (ADDITIONAL SERVICE TASK)

If PER recommendation is to proceed with expanding the existing building, this task will be required in order to capture critical dimensions and elevations for final design development due to the poor quality of available Record Drawings.

Engineer will perform detailed as-built survey of the interior of the Membrane building using high-definition 3D laser scanning (Terrestrial LiDAR) Trimble 3D Laser scanning systems. Horizontal (NAD83) and Vertical (NAVD88) control will be established and transferred into the building. The High-Definition Survey will capture data with sub-centimeter level accuracy and detail to create a 3D pointcloud replicating the as-built conditions. The 3D point cloud will be processed and exported to 2D CAD environment to create a complete CAD drawing of the building's interior infrastructure.

Attachment A / Detailed Scope of Engineering Services

TASK 8.0 – MISCELLANEOUS ADDITIONAL SERVICE TASKS

These items are not part of the basic engineering services and will be added to the scope of services upon written authorization from CRWA. The services provided under this task will be used at CRWA's discretion on an as-needed basis.

8.1. CRWA Board Meetings

Engineer attend CRWA in-person meetings to provide project update and information to the CRWA Board of Managers, Construction Committee, and Board of Trustees over the course of project PER phase. These meetings will occur once a month. It is assumed no more than 27 meetings during the PER phase.

8.2. Feasibility Study for Taste and Odor (T&O) Control

The HC WTP has experienced seasonal fluctuations of earthy/musty T&O which is derived from the presence algal by-products such as methylisoborneol (MIB) and geosmin. There are several potential strategies for T&O control that include the addition of powdered activated carbon (PAC), adsorption using granular activated carbon (GAC) contactors and advanced oxidation processes (AOPs). The AOPs include ozone/hydrogen peroxide oxidation and ultraviolet (UV) light/hydrogen peroxide oxidation. Engineer will conduct a desktop, qualitative assessment of the available strategies.

The Engineer will contract with a specialist laboratory to conduct bench-scale tests that will include:

- Adsorption tests for PAC type, dose and contact time. Up to three kinds of PACs will be tested.
- Rapid small scale column tests (RSSCTs) to determine GAC loading rates, empty bed contact time (EBCT) and replacement frequency. Up to three RSSCTs will be performed.

Bench-scale tests will be conducted by spiking with MIB to simulate the worst-case water quality conditions.

Engineer will use the bench-scale test results and prepare life-cycle costs for each T&O alternative. From the desktop assessment findings, bench-scale test results and life-cycle cost estimates, the Engineer, in consultation with CRWA and its participant entities, will identify the best strategies for the full-scale plant consideration.

Deliverable: Tech Memo Summarizing Findings from Feasibility Study

8.3. HC WTP Misc. Enhancement

Per discussion with CRWA, it is desired to enhance current design of splitter box and chemical mixing mechanism in the Improvements project to enhance chemical mixing efficiency. Engineer will review the current design and propose modifications for design revisions.

Attachment A / Detailed Scope of Engineering Services

In addition, CRWA staff expressed maintenance concerns with the proposed decant ponds. A better solution is desired by CRWA staff for plant residual handling. Engineer will perform a preliminary engineering design to look at alternatives for improving plant residual handling process. Recommendations can be incorporated in the final design of the membrane improvements project.

Deliverable: Tech Memo Summarizing Residual Handling Improvements

TASK 9.0 – OTHER SERVICE TASKS, CLARIFICATIONS AND EXCLUSIONS

Other service tasks will be negotiated with CRWA as needed, including additional studies and investigation as required to support recommended solution and/or as required to address system which may become affected as a result of the proposed work but not originally envisioned or as added by CRWA. These other services may include the following and will be authorized by CRWA in writing for an additional fee as agreed upon by CRWA and the Engineer:

1. Any additional meetings, outside of those listed herein
2. Pilot study analytical laboratory testing
3. Pilot plant construction and pilot equipment
4. Pilot testing chemicals
5. Hydraulic transient analysis
6. Topographic survey performed in the HC WTP Improvements project will be used. Any additional survey that is needed as identified during the PER phase will be performed in the final design.
7. Any off-site survey work outside the plant fence line
8. Subsurface utility engineering
9. Geotechnical Report performed in the HC WTP Improvements project will be used. Any additional geotechnical borings and laboratory testing that may be needed as identified during the PER phase will be performed in the final design.
10. Phase 1 and Phase 2 environmental site assessment (ESA)
11. USACE Permitting
12. Archeological investigation Services
13. ACI-ADI review for ADA compliance (anticipated for the final design phase)
14. Computational fluid dynamics (CFD) modeling
15. Electrical studies such as short circuit, coordination, motor starting, and arc flash studies (anticipated for the final design phase)
16. Plant-wide security system design
17. FAA permitting
18. Physical laboratory scale modeling
19. Drawings will be developed in 2D version of AutoCAD
20. Site landscaping

CRWA HC WTP Membrane Improvements
Preliminary Engineering Design Phase
Level of Efforts Fee Estimate

Autism Estimated Man-hours																									
Task	Estimate	Task Description	Proj. Eng. (Process Mgmt/Spec)	Proj. Eng. (Tech/Spec)	Proj. Eng. (Arch/Proc)	IT (Process Mgmt)	Sr. Prog. Mgr (Arch/Proc)	IT (Process Mgmt)	Proj. Eng. (Tech/Spec)	Proj. Eng. (Arch/Proc)	Word Processor	Sr. CAD Designer	Field Crew (2-Min Crew)	Survey (OS/PM)	Env. Scanning	Dr. Env. Scanning	Contract Admin	Autism Support	QDCS	Autism Subtotal	Cyber (Electrical)	JOH (ME/PM)	Subcontractor Total	Autism Sub	Total Cost (Estimate)
Rate	\$ 280.00	\$ 280.00	\$ 225.00	\$ 180.00	\$ 140.00	\$ 140.00	\$ 240.00	\$ 240.00	\$ 240.00	\$ 240.00	\$ 130.00	\$ 100.00	\$ 200.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 95.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00	\$ 100.00
TABLE 1 - GENERAL PROJECT MANAGEMENT AND QUALITY CONTROL																									
1.1	4	Project Work Plan / Kick-off Meeting	25	24							4						56	\$ 10,880.00	\$ 5,512.00	\$ 10,880.00	\$ 5,512.00		\$ 5,512.00	\$ 10,880.20	
1.2	4	Project Meetings (up to 4 progress meetings)	8	16							2						34	\$ 6,800.00	\$ 50.00	\$ 6,800.00	\$ 50.00		\$ 50.00	\$ 6,850.00	
1.3	4	Project Meetings (up to 4 progress meetings)	40	48							6						158	\$ 29,640.00	\$ 17,214.00	\$ 29,640.00	\$ 17,214.00	\$ 770.00	\$ 770.00	\$ 30,414.00	
1.4	56	Technical Review							13								60	\$ 17,340.00	\$ 17,340.00	\$ 17,340.00	\$ 17,340.00	\$ 50.00	\$ 50.00	\$ 17,390.00	
1.5	6	Project monthly progress report and modeling	13														12	\$ 4,920.00	\$ 4,920.00	\$ 4,920.00	\$ 4,920.00	\$ 760.00	\$ 760.00	\$ 5,680.00	
Task 1.6 - GENERAL PROJECT MANAGEMENT AND QUALITY CONTROL																									
1.6	56	Project Task Expenses (5% on Subtotal Hrs Cost)	72	89	0	13	12	0	0	0	0	0	0	0	0	0	313	\$ 84,110.00	\$ 3,412.00	\$ 84,110.00	\$ 3,412.00	\$ 270.00	\$ 270.00	\$ 84,380.00	
Phase 1 - Conceptual Design/Phase 2 Design Technical Memorandum																									
TABLE 2 - CONCEPTUAL DESIGN/PHASE 2 DESIGN TECHNICAL MEMORANDUM																									
2.1		Data Collection and review	40	56													96	\$ 15,840.00	\$ 15,840.00	\$ 15,840.00	\$ 15,840.00	\$ 50.00	\$ 50.00	\$ 15,890.00	
2.2	8	Alternative Development and Conceptual Design	16	32													224	\$ 20,740.00	\$ 20,740.00	\$ 20,740.00	\$ 20,740.00	\$ 50.00	\$ 50.00	\$ 20,790.00	
2.3	8	Alternative Evaluation	16	32													64	\$ 11,240.00	\$ 11,240.00	\$ 11,240.00	\$ 11,240.00	\$ 50.00	\$ 50.00	\$ 11,290.00	
2.4		Workshops															4	\$ 480.00	\$ 480.00	\$ 480.00	\$ 480.00	\$ 50.00	\$ 50.00	\$ 530.00	
2	4	Workshop 1 - Membrane Alternative Development	4	8													22	\$ 4,800.00	\$ 4,800.00	\$ 4,800.00	\$ 4,800.00	\$ 50.00	\$ 50.00	\$ 4,850.00	
2	4	Workshop 2 - Alternative Banding and Selection	4	8													22	\$ 4,800.00	\$ 4,800.00	\$ 4,800.00	\$ 4,800.00	\$ 50.00	\$ 50.00	\$ 4,850.00	
Project Task Expenses (5% on Subtotal Hrs Cost)																									
2.4	16	Project Task Expenses (5% on Subtotal Hrs Cost)	18	100	0	0	0	0	0	0	0	0	0	0	0	0	312	\$ 52,216.00	\$ 2,776.00	\$ 52,216.00	\$ 2,776.00	\$ 150.00	\$ 150.00	\$ 52,366.00	
Task 2.5 - MEMBRANE ALTERNATIVE EVALUATION																									
2.5	12	Membrane Alternative Evaluation	12	12													112	\$ 12,960.00	\$ 12,960.00	\$ 12,960.00	\$ 12,960.00	\$ 50.00	\$ 50.00	\$ 13,010.00	
Task 2.6 - MEMBRANE PILOT STUDY																									
2.6	40	Pilot Plant Facilities Design Document Development and Start-up Assistance	40	40													8	\$ 29,600.00	\$ 29,600.00	\$ 29,600.00	\$ 29,600.00	\$ 50.00	\$ 50.00	\$ 29,650.00	
Task 2.7 - MEMBRANE PILOT STUDY																									
2.7	15	Pilot Plant Facilities Design Document Development	40	120													216	\$ 31,800.00	\$ 31,800.00	\$ 31,800.00	\$ 31,800.00	\$ 570.00	\$ 570.00	\$ 32,370.00	
2.8	15	Pilot Plant Operations	32	40													88	\$ 15,760.00	\$ 15,760.00	\$ 15,760.00	\$ 15,760.00	\$ 50.00	\$ 50.00	\$ 15,810.00	
2.9	30	Pilot Study Report	60	120													368	\$ 54,880.00	\$ 54,880.00	\$ 54,880.00	\$ 54,880.00	\$ 50.00	\$ 50.00	\$ 54,930.00	
Project Task Expenses (5% on Subtotal Hrs Cost)																									
2.9	12	Project Task Expenses (5% on Subtotal Hrs Cost)	12	204	0	0	0	0	0	0	0	0	0	0	0	0	234	\$ 40,770.00	\$ 40,770.00	\$ 40,770.00	\$ 40,770.00	\$ 50.00	\$ 50.00	\$ 40,820.00	
Phase 2 - Preliminary Design																									
TABLE 3 - PRELIMINARY DESIGN/PHASE 2 DESIGN TECHNICAL MEMORANDUM																									
3.1		Preliminary Engineering Design															108	\$ 15,120.00	\$ 15,120.00	\$ 15,120.00	\$ 15,120.00	\$ 50.00	\$ 50.00	\$ 15,170.00	
3.2	6	Membrane System Evaluations and 30% Drawing	10	24													48	\$ 8,320.00	\$ 8,320.00	\$ 8,320.00	\$ 8,320.00	\$ 50.00	\$ 50.00	\$ 8,370.00	
3.3	4	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.4	8	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.5	8	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.6	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.7	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.8	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.9	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.10	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.11	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.12	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.13	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.14	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.15	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.16	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.17	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.18	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.19	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.20	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.21	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.22	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.23	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.24	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.25	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.26	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.27	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.28	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.29	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.30	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.31	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.32	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.33	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.34	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.35	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.36	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.37	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.38	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.39	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 3,520.00	\$ 50.00	\$ 50.00	\$ 3,570.00	
3.40	6	Membrane System Evaluations and 30% Drawing	10	24													16	\$ 3,520.00	\$ 3,520.00						

CRWA HC WTP

Preliminary Engineering Report

Gupta & Associates, Inc.

TASK SUMMARY - BASIC SERVICES

CRWA HC WTP Preliminary Engineering Report																									



August 10, 2023

Yue Sun, PE
Water Treatment Practice Leader/ Sr. Project Manager
Ardurra Group, LLC
3115 Allen Pkwy Suite 300
Houston, TX 77019

Dear Ms. Sun,

Thank you for the opportunity for KWH Engineering to provide HVAC engineering consulting service for the Canyon Regional Water Authority Hays Caldwell WTP Nanofiltration System Improvements project. We are pleased to propose the followings for our scope and fee.

Scope:

Preliminary Design Phase

- Assess the HVAC/Plumbing/Fire Protection requirements for two (2) improvement alternatives for the membrane building improvements, including:
 - 1) Expansion of the existing membrane building
 - 2) Construction of a new membrane building to house new equipment
- The HVAC/Fire Protection tasks include project kickoff, information/data collection, code review and analysis, confirmation of design criteria, site visit, development of PDR, OPCC, and development 2D schematic layout (20% level design), etc.

Fee:

Project Management:	\$720
Preliminary Engineering Design:	\$16,920
Total (lump sum):	<u>\$17,640</u>

Assumption:

One site visit (conducted on July 5, 2023). Any additional site visits will incur an extra fee upon request.

Thank you very much! We are excited and look forward to working with you on this project!

Sincerely,

A handwritten signature in blue ink, appearing to read 'Sophi Feng'.

Sophi Feng, PE

Manager

KWH Engineering LLC

CRWA



**CANYON REGIONAL WATER AUTHORITY
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
09/11/2023	AWARD OF CONSTRUCTION CONTRACT	CRWA 23-09-054

INITIATED BY

JOHN KAUFMAN / DAVID McMULLEN

STAFF RECOMMENDATION

Approval of a construction contract award with RAM Utilities, LLC for the CRWA FM 1518 Water Transmission Line Relocation Project in the amount of \$731,420.79.

BACKGROUND INFORMATION

Four (4) construction bids for the project were received on August 29, 2023. Three (3) of the bids received satisfied all the bid requirements and are considered qualified bids.

On August 31, 2023, Utility Engineering Group (UEG) determined that RAM Utility, LLC submitted the lowest cost qualified bid and recommends that RAM Utility be awarded the construction contract for the base bid amount of \$731,420.79. UEG's letter of recommendation is attached.

FINANCIAL IMPACT

Approximately 20.02% of the construction project (or \$146,430.22) would be reimbursable. The remainder (about \$584,990.57) would not be reimbursable.

MOTION

Motion to approve the following resolution.

AT
for GM

CANYON REGIONAL WATER AUTHORITY

RESOLUTION NO. 23-09-054

BE IT RESOLVED that a Construction Contract award to RAM Utilities, LLC for the CRWA FM 1518 Water Transmission Line Relocation Project in the amount of \$731,420.79 is approved.

Adopted this 11th day of September 2023

Ayes ____ Nays ____ Abstained ____ Absent ____

Approved by: _____
Timothy D. Fousse, CPM
President

Certified and attested by: _____
Doris Steubing
Secretary



August 31, 2023

Mr. John Kaufman
General Manager
Canyon Regional Water Authority
850 Lakeside Pass
New Braunfels, Texas 78130

**Re: Canyon Regional Water Authority – FM 1518 TxDOT Water Transmission Main
Relocation
Recommendation for Award**

Dear Mr. Kaufman,

Utility Engineering Group, PLLC (UEG) has reviewed the bids received on Tuesday, August 29, 2023, for the Canyon Regional Water Authority (CRWA) FM 1518 Water Transmission Main Relocation Project. CRWA received four (4) bids for this project. Of the four bids, one bid contained a math error, and one bid did not include all required forms to be submitted as noted on the attached bid tabulation. The project was advertised in the San Antonio Express News on July 20th and July 27th, 2023. The project was also posted on CIVCAST for the duration of the bidding process.

UEG recommends awarding the lowest cost, most responsive bidder, Ram Utilities, LLC, for the total base bid of \$731,420.79. Ram Utilities, LLC met all requirements in the bid documents and their bid submittal satisfied all requirements for CRWA. Ram Utilities, LLC has provided the required bid security, information required of the bidder, and qualifications statement as required by the bid documents; therefore, we have no reservation recommending approval of this project to Ram Utilities, LLC.

Sincerely,


David Kneuper, P.E.
Utility Engineering Group, PLLC
Office: (830) 214-0521
davidk@uegpros.com



Attachments: Bid Tabulation

CANYON REGIONAL WATER AUTHORITY - FM 1518 WATER TRANSMISSION MAIN RELOCATIONS

Project Name and Phase: CRWA - FM 1518 WATER TRANSMISSION MAIN RELOCATIONS
 Engineering Firm: UTILITY ENGINEERING GROUP
 Prepared By : David Kneuper, P.E.



Bid Tabulations

		RAW UTILITIES LLC				Maverick Underground Inc.				Nelson Lewis Inc.				Pessico Construction Company			
Line No	Item Description	Unit	Unit Price	Quantity	Total Amount	Unit Price	Quantity	Total Amount	Unit Price	Quantity	Total Amount	Unit Price	Quantity	Total Amount			
Base Bid																	
1	BONDS, MOBILIZATION, & INSURANCE	LS	\$66492.80	1	\$66,492.80	\$38850.00	1	\$38,850.00	\$40000.00	1	\$40,000.00	\$90000.00	1	\$90,000.00			
2	TRENCH EXCAVATION PROTECTION PLAN & IMPLEMENTATION	LF	\$3.50	50	\$175.00	\$61.25	50	\$3,062.50	\$10.00	50	\$500.00	\$121.00	50	\$6,050.00			
3	HYDROSTATIC TESTING & PIPE DISINFECTION	LS	\$4500.00	1	\$4,500.00	\$1320.75	1	\$1,320.75	\$5000.00	1	\$5,000.00	\$4836.00	1	\$4,836.00			
4	MATERIAL TESTING	LS	\$6875.00	1	\$6,875.00	\$8625.00	1	\$8,625.00	\$500.00	1	\$500.00	\$5000.00	1	\$5,000.00			
5	DEWATERING PLAN & IMPLEMENTATION	LS	\$1740.00	1	\$1,740.00	\$7164.00	1	\$7,164.00	\$500.00	1	\$500.00	\$13000.00	1	\$13,000.00			
6	SITE PREPARATION	LF	\$50.00	297	\$14,850.00	\$10.00	297	\$2,970.00	\$20.00	297	\$5,940.00	\$48.50	297	\$14,404.50			
7	TRAFFIC CONTROL	MO	\$5685.00	4	\$22,740.00	\$4142.00	4	\$16,568.00	\$200.00	4	\$800.00	\$5306.00	4	\$21,224.00			
8	30" DI CL 250 WTR LN (OPEN CUT)	LF	\$470.00	48	\$22,560.00	\$475.00	48	\$22,800.00	\$900.00	48	\$43,200.00	\$1600.00	48	\$76,800.00			
9	30" DI CL 250 WTR LN (BORE)	LF	\$831.00	249	\$206,919.00	\$1200.00	249	\$298,800.00	\$600.00	249	\$149,400.00	\$515.00	249	\$128,235.00			
10	42" STEEL CASING & CASING SPACERS (JACK & BORE)	LF	\$460.00	249	\$114,540.00	\$584.00	249	\$145,416.00	\$1550.00	249	\$385,950.00	\$1200.00	249	\$298,800.00			
11	30" GATE VALVE & BOX (COMPLETE)	EA	\$106537.24	1	\$106,537.24	\$82020.00	1	\$82,020.00	\$85000.00	1	\$85,000.00	\$61380.00	1	\$61,380.00			
12	TIE-IN (COMPLETE) (60 IN)	EA	\$24259.00	2	\$48,518.00	\$15008.00	2	\$30,016.00	\$25000.00	2	\$50,000.00	\$42051.50	2	\$84,103.00			
13	DUCTILE IRON FITTINGS	TON	\$22115.00	3	\$66,345.00	\$25445.00	3	\$76,335.00	\$20000.00	3	\$60,000.00	\$55825.00	3	\$167,475.00			
14	ABANDONMENT OF EX 42" STEEL CASING IN-PLACE, REMOVAL OF CARRIER PIPE, CASING TO BE FILLED WITH FLOWABLE FILL AND CAPPED	LF	\$145.00	76	\$11,020.00	\$81.75	76	\$6,213.00	\$350.00	76	\$26,600.00	\$170.50	76	\$12,958.00			
15	REMOVAL OF EX 30" WATER LINE AND 42" STEEL CASING	LF	\$55.00	139	\$7,645.00	\$21.00	139	\$2,919.00									
16	STABILIZED CONSTRUCTION ENTRANCE	EA	\$4650.00	2	\$9,300.00	\$1170.25	2	\$2,340.50	\$3000.00	2	\$6,000.00	\$2245.00	2	\$4,490.00			
17	SILT FENCE	LF	\$6.75	369	\$2,480.75	\$6.50	369	\$2,398.50	\$8.00	369	\$2,952.00	\$16.00	369	\$5,904.00			
18	SITE RESTORATION, FINAL GRADE, & REVEGETATION	SY	\$10.69	1700	\$18,173.00	\$2.00	1700	\$3,400.00	\$1.00	1700	\$1,700.00	\$16.00	1700	\$27,200.00			
TOTAL BASE BID COST:					\$731,420.79			\$751,214.25			\$908,402.00			\$1,059,745.00			
ALTERNATE BID																	
10A	REPLACE BASE BID ITEM NO. 10 WITH 48" STEEL CASING & CASING SPACERS (JACK & BORE)	LF	\$1181.86	249	\$289,303.14	\$646.00	249	\$160,854.00	\$1790.00	249	\$445,710.00	\$517.00	249	\$128,793.00			
TOTAL ALTERNATE BID COST:					\$906,183.93			\$765,652.25			\$943,262.00			\$1,198,478.00			
Notes:							*MISSING QUALIFICATIONS STATEMENTS AND SIGNED BID FORM PAGE					CONFIRMED WITH CONTRACTOR THAT ITEM 10A UNIT PRICE IS IN ADDITION TO ITEM 10					

**CANYON REGIONAL WATER AUTHORITY
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
09/11/2023	FIXED COST BLENDING ANALYSIS	CRWA 23-09-055

INITIATED BY

JOHN KAUFMAN / JOAN WILKENS

STAFF RECOMMENDATION

Approval of a contract with NewGen Strategies & Solutions to perform an analysis of fixed cost blending for Lake Dunlap and Wells Ranch Operating Expenses at a cost not to exceed \$17,500.

BACKGROUND INFORMATION

CRWA Staff and member entities of the Lake Dunlap and Wells Ranch systems desire to determine if there is an appropriate accounting methodology that could be acceptable between CRWA member entities which would blend fixed costs for these systems to continue to move CRWA toward a system-wide cost allocation approach. This evaluation would involve potential revision of the current fixed cost allocation methodology for the Lake Dunlap and Wells Ranch Systems.

NewGen Strategies & Solutions, which is familiar with CRWA's accounting system and has performed other accounting studies for CRWA, was requested to submit a proposal to conduct this accounting analysis. Their proposal is attached.

FINANCIAL IMPACT

The fiscal impact is \$17,500.

MOTION

Motion to approve the following resolution.

AT
for Gm

CANYON REGIONAL WATER AUTHORITY

RESOLUTION No. 23-09-055

BE IT RESOLVED that a contract with NewGen Strategies & Solutions to perform an analysis of fixed cost blending for Lake Dunlap and Wells Ranch Operating Expenses at a cost not to exceed \$17,500 is approved.

Adopted this 11th day of September 2023

Ayes ____ Nays ____ Abstained ____ Absent ____

Approved by: _____
Timothy D. Fousse, CPM
President

Certified and attested by: _____
Doris Steubing
Secretary



275 W. Campbell Rd.
Suite 440
Richardson, TX 75080
Phone: (972) 680-2000

August 29, 2023

Ms. Joan Wilkinson
Canyon Regional Water Authority
850 Lakeside Pass
New Braunfels, Texas 78130

Re: Engagement Letter—Analysis of Fixed Cost Blending for Lake Dunlap and Wells Ranch Operating Expenses

Dear Ms. Wilkinson:

Based on our conversations, it is our understanding that Canyon Regional Water Authority ("CRWA") is interested in engaging NewGen Strategies and Solutions, LLC ("NewGen") to assist CRWA in evaluating the potential revision to the current fixed cost allocation methodology for the Lake Dunlap and Wells Ranch Systems. Specifically, CRWA is interested in determining if there is a methodology that would be acceptable between CRWA members and project participants which would blend fixed cost for these systems to continue to move CRWA towards more of a system-wide cost allocation approach.

At this time, we anticipate the scope of services of this engagement to include, but not necessarily be limited to, the following:

- Review up to the last three (3) years of fixed cost allocation specific to the Lake Dunlap and Wells Ranch systems;
- Based on this review, evaluate potential alternative fixed cost allocation methodologies, or phase-in methodologies, which would achieve a blending of fixed costs, reflective of any limitations that may exist with the currently applicable ;
- Prepare workpapers and/or other briefing materials to explain the issue to project participants and the proposed changes to the cost allocation method;
- Attend meetings or other briefing sessions that may be needed to explain the work of the project team;
- Should project participants desire to implement the proposed cost allocation method or some other alternative, work with staff on developing the processes and procedures necessary to implement the chosen methodology; and,
- Other services as may be requested to achieve the desired project goals and objectives.

Ms. Joan Wilkinson
 August 29, 2023
 Page 2

Proposed Timing and Fees

The Project Team will endeavor to work as quickly as possible to provide CRWA with draft results / recommendations for consideration.

NewGen anticipates that the fees necessary to execute the above scope of services to be **\$17,500, inclusive of out-of-pocket expenses incurred at cost. NewGen commits that those costs incurred under this agreement will not exceed \$17,500 without prior written authorization of CRWA.** However, CRWA specifically agrees that NewGen shall not be required to furnish services or incur expenses above \$17,500 without additional funding committed by CRWA.

As services are requested and performed under this engagement, NewGen will invoice CRWA on a monthly basis for actual hours worked at our then applicable hourly billing rates, plus out-of-pocket expenses incurred at cost. Our current billing rates, which will remain in effect through December 31, 2024, are as follows:

NewGen Strategies and Solutions 2024 Billing Rates

Position	Hourly Billing Rate
Partner	\$265 – \$405
Principal	\$250 – \$405
Senior Manager	\$225 – \$280
Manager	\$195 – \$225
Senior Consultant	\$170 – \$195
Consultant	\$160 – \$170
Administrative Services	\$130

Note: Billing rates are subject to change based on annual reviews and salary increases.

Other Terms and Conditions

This agreement is subject to cancellation by CRWA with thirty (30) days prior written notice provided to NewGen. In the event of cancellation, all labor and expense charges incurred by NewGen through the date of cancellation will be considered due at the time notice of cancellation is delivered, regardless of work product and/or engagement status.

All payments made under this engagement should be remitted to:


NewGen Strategies and Solutions, LLC
 275 W. Campbell Rd, Suite 440
 Richardson, Texas 75080

By executing this letter, you agree that the services rendered by NewGen will be performed in accordance with instructions or specifications received by CRWA and will be provided with the degree of skill and judgment exercised by recognized professionals performing services of similar nature and consistent with the applicable industry best practices. You further agree that compensation for services rendered will be provided to NewGen regardless of the final outcome of the engagement.

Ms. Joan Wilkinson
August 29, 2023
Page 3

If this letter and its terms and conditions are acceptable, please execute one copy and return to our Richardson, Texas office. If you should have any questions regarding this letter and/or require additional information, please contact Chris Ekrut at (972) 232-2234 or cekrut@newgenstrategies.net.

Very truly yours,
NewGen Strategies and Solutions, LLC

DocuSigned by:

Chris D. Ekrut

Chief Financial Officer

Canyon Regional Water Authority
Analysis of Fixed Cost Blending for Lake Dunlap and Wells Ranch Operating Expenses
Not-to-Exceed Fee of \$17,500

Signed _____ Printed _____

Title _____ Date _____

**CANYON REGIONAL WATER AUTHORITY
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
09/11/2023	EMPLOYEE LIFE INSURANCE BENEFITS	CRWA 23-09-056

INITIATED BY

JOHN KAUFMAN / JOAN WILKENS ON

STAFF RECOMMENDATION

Approval of additional life insurance benefits for CRWA employees through the Texas County and District Retirement System (TCDRS) at a rate of 0.17% of wages for a cost of \$3,413.00 in FY 2024.

BACKGROUND INFORMATION

TCDRS is offering additional life insurance benefits for CRWA employees at a very low cost. The additional cost is included in the proposed FY 2024 Budget. TCDRS desires the CRWA Board of Trustees to pass a specific resolution authorizing the new life insurance benefits for its employees.

FINANCIAL IMPACT

The financial impact is \$3,413.00 in FY 2024 and is included in the FY 2024 Budget.

MOTION

Motion to approve the following resolution.

AT
for GM

CANYON REGIONAL WATER AUTHORITY

RESOLUTION No. 23-09-056

BE IT RESOLVED that additional life insurance benefits for CRWA employees through the Texas County and District Retirement System (TCDRS) at a rate of 0.17% of wages for a cost of \$3,413.00 in FY 2024 is approved.

Adopted this 11th day of September 2023

Ayes _____ Nays _____ Abstained _____ Absent _____

Approved by: _____
Timothy D. Fousse, CPM
President

Certified and attested by: _____
Doris Steubing
Secretary

**CANYON REGIONAL WATER AUTHORITY
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
09/11/2023	NEW RATE METHODOLOGY FOR HAYS CALDWELL PARTICIPATING MEMBERS	CRWA 23-09-057

INITIATED BY

DORIS STEUBING OF MAXWELL SUD

RECOMMENDATION

Approval to take appropriate action regarding the Amended and Restated Regional (Hays/Caldwell Counties Area) Water Supply and Treatment Contract, made effective February 9, 2021, including but not limited to, directing CRWA staff to develop a new rate methodology for Participating Members who exceed their annual allotment of water under the Contract.

BACKGROUND INFORMATION

The motion above was requested by Ms. Doris Steubing, Board Member of the Maxwell SUD and Secretary of CRWA on September 6, 2024, in an email to Justin Ivicic, GM of Maxwell SUD, with electronic copy John Kaufman (General Manager of CRWA), Trey Wilson (Special Counsel to CRWA), Tim Fousse (President of CRWA), Brannndon Rohan (Vice President of CRWA), Zachariah Evans (Counsel to Maxwell SUD), and Regina Franke (General Manager of Crystal Clear and CRWA Treasurer).

A copy of the Amended and Restated Regional (Hays/Caldwell Counties Area) Water Supply and Treatment Contract, made effective February 9, 2021, is included herein by reference.

FINANCIAL IMPACT

There is no financial impact forecast at this time.

MOTION

Motion to approve the following resolution.

AT
For GM

CANYON REGIONAL WATER AUTHORITY

RESOLUTION NO. 23-09-057

AND

**RESOLUTION DIRECTING CANYON REGIONAL WATER AUTHORITY TO IMPLEMENT
EQUITABLE RATE METHODOLOGY FOR ALL PARTICIPATING MEMBERS OF THE
AMENDED AND RESTATED REGIONAL (HAYS/CALDWELL COUNTIES AREA)
WATER SUPPLY AND TREATMENT CONTRACT, MADE EFFECTIVE FEBRUARY 9, 2021**

WHEREAS, Canyon Regional Water Authority (the "Authority") entered into the above-referenced Contract with participating members Maxwell Special Utility District ("Maxwell"), County Line Special Utility District ("County Line"), Crystal Clear Special Utility District ("Crystal Clear"), and the City of San Marcos ("City") (collectively the Participating Members"); and

WHEREAS, pursuant to Schedule I of the Contract, Crystal Clear was originally allotted 500 acre-feet of capacity in the Hays-Caldwell Area Plant ("Plant"), and, under Schedule II, Crystal Clear was not allotted any additional water from the Plant; and

WHEREAS, in 2022, Crystal Clear took over 700 acre-feet of water from the Plant, but did not pay its equitable share of all maintenance and special assessment costs associated with the Plant's production of the additional water that Crystal Clear took ; and

WHEREAS, Section 5.01 of the Contract provides the Participating Members annual payments for their share of the Plant's capacity ("Annual Requirement") shall be set by the "Authority based upon a rate methodology to be developed by the Authority and according to their respective percentage shares of treated water covered by this Amended and Restated Contract ... and the Annual Requirement for each Annual Payment Period shall be identified in each annual budget and shall at all times be not less than an amount sufficient to pay or provide for the payment of ☐ all Participating Members Operation and Maintenance Expenses" and a capital component sufficient to pay the bonds issued under the Contract; and

WHEREAS, because the Contract makes clear the Authority has the responsibility of setting a rate methodology, the Board of Trustees finds the Authority's staff and consultants must determine a new rate Mmthodology that is fair and equitable to all Participating Members;

Now, therefore, **BE IT RESOLVED** as follows:

The General Manager of the Authority and its consultants are directed to calculate a new rate methodology that is fair and equitable to all of the Participating Members. The rate methodology must also fairly account for any capacity Participating Members may take above and beyond the quantities allotted under the Contract.

[Execution page follows.]

Adopted this 11th day of September 2023

Ayes _____ Nays _____ Abstained _____ Absent _____

Approved by: _____
Timothy D. Fousse, CPM
President

Certified and attested by: _____
Doris Steubing
Secretary

