

**REGULAR BOARD MEETING  
CANYON REGIONAL WATER AUTHORITY  
Monday August 14, 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 August 14, 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    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](mailto:fran@crwa.com) prior to the meeting. Written comments may also be submitted. If you wish to speak, please state your name.*

**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

**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
- Wells Ranch WTP:
  - Production
  - Well rehabilitation and pump repairs
- B. Wells Ranch III Project ~ *Staff*
  - Draft Water Supply and Treatment Contract
  - 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*

**Item 8**     **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:
  - 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*

**Item 9**     **GENERAL BUSINESS**

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

- 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.
- 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.

**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.

**Item 11 RETURN TO OPEN MEETING**

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

**Item 12 FUTURE BOARD MEMBER AGENDA ITEMS**

**Item 13 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.



**CANYON REGIONAL WATER AUTHORITY  
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
08/14/2023	CONSENT AGENDA ITEM BOARD OF TRUSTEES MEETING MINUTES OF JULY 10, 2023	CRWA 23-08-044

**INITIATED BY**

JOHN KAUFMAN / FRAN POWERS

**STAFF RECOMMENDATION**

Approve the Minutes of the Regular Board Meeting of the Board of Trustees held on July 10, 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.





**CANYON REGIONAL WATER AUTHORITY**

**RESOLUTION NO. 23-08-044**

BE IT RESOLVED that the Minutes of the Regular Meeting of the Board of Trustees held on July 10, 2023, as amended, or not amended, are approved.

Adopted this 14<sup>th</sup> day of August 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, July 10, 2023, at 6:00 p.m.

The following individuals attended the meeting:

<b>Board of Trustees:</b>		<b>CRWA Staff:</b>		<b>Board of Managers and Others:</b>	
Ted Gibbs	Brandon Rohan	John Kaufman	Humberto Ramos	Pat Allen	David Kneuper
Martin Poore	Steve Cooper	Adam Telfer	Joan Wilkinson	Justin Ivicic	David Rabago
Gary Gilbert	Christina Miller	David McMullen	Fran Powers	Louis Rosenberg	Daniel Smith
Tracy Scheel	Steve Forville			Byron Sanderfer	Greg Swaboda
Donald Bosworth	James Forssell			Graham Moore	
Regina Franke	Mabel Vaughn				
Randy Schwenn	Clint Ellis				

**Item 1 CALL TO ORDER**

» Vice President Brandon Rohan opened the meeting at approximately 6:00 p.m.

**Item 2 BOARD ROLL CALL**

» Fourteen (14) 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](mailto:fran@crwa.com) prior to the meeting. Written comments may also be submitted. If you wish to speak, please state your name.*

» Donald Bosworth apologized to Fran Powers, Tim Fousse, John Kaufman, and Legal Counsel for a comment he made at the June 12, 2023, Board of Trustees meeting regarding the CRWA Policies and Procedures information.

**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 23-07-039  
Adopt Resolution 23-07-039 approval of Board of Trustees meeting minutes of June 12, 2023
- B. CRWA 23-07-040  
Adopt Resolution 23-07-040 approval of May 2023 Financial Report and Check Register Report until audited
- C. CRWA 23-07-041  
Adopt Resolution 23-07-041 approval of Third Quarter FY2023 Investment Report

- » Randy Schwenn made a motion to approve Resolution 23-07-039, Resolution 23-07-040, and Resolution 23-07-041.
- » Regina Franke seconded the motion.
- » Vice President Rohan called for a vote. The motion passed with 14 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**

» **The staff report was in the Board packet, but there was additional information added:**

- ♦ Lake Dunlap ~ John Kaufman stated as a result of the taste and odor issues, SAWS decided to stop taking water from Lake Dunlap and use their Edwards wells. This caused production to decrease at Lake Dunlap and production to increase at Wells Ranch. He added that TCEQ is planning to test for PFAS chemicals at the Lake Dunlap WTP in August.
- ♦ Hays Caldwell ~ Mr. Kaufman added CRWA has started discussions with Ardurra regarding the scope of work for engineering services for increasing the production at the plant to 6 MGD. He stated that TCEQ took samples at HC and found 2 out of 29 toxic PFAS chemicals which are used in industrial surfactants.
- ♦ Draft Water Supply and Treatment Contract ~ Humberto Ramos added that the debt schedules are to be sent out soon and the contract language regarding the System Capacity Fee is still being drafted.
- ♦ Groundwater Districts of Guadalupe and Gonzales Counties ~ Mr. Ramos added CRWA requested 940 AF amendment to our permit in Gonzales County and the application will be presented to the Board in August.

» **Legal and Legislative matters** ~ Lou Rosenburg stated he has been assisting the Policy and Legislative Committee.

**Item 8 CRWA COMMITTEE REPORTS**

**Budget Committee: No items**

- » The next meeting is schedule for July 19, 2023 at 11:00 a.m.

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

- » Ted Gibbs stated the Bylaws will be on the August agenda for approval and ratification requires a majority of the Trustees to pass the document. The Personnel Policy is still under revision.

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



- A. Project Status Comments and Updates on Committee Activity ~ *Committee Chairman*
- » Vice President Rohan reported on the following projects:
    - ♦ For the FM 1518 project, UEG is expecting bid documents to be ready in August and have the award at the September Board meeting.
    - ♦ The RFQ for engineering services at the LDWTP was sent out for comments and is scheduled to be issued on July 12.
    - ♦ Ardurra met with the Texas Department of Emergency Management (TDEM) about CRWA's Hazard Mitigation Grant Program (HMGP) funding request for the Hays Caldwell Project. TDEM suggested CRWA apply for similar funding in case our existing application is not selected. CRWA received the nation-wide permit for the intake structure in the river. Ardurra is continuing to work with the City of San Marcos on permits.
    - ♦ Staff is working with Heirholzer and Pall to make changes to the SCADA system. Staff is devoting a lot of time to make sure the Pall trailer stays contentiously running. The trailer is currently producing 1.5 MGD and there have not been additional membrane failures.
- B. 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*
  - 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 of Alliance did not add new information to his written report.
  - » **Geographic Information System (GIS), TxDOT/CRWA IH-10 (Santa Clara & Zuehl) Pipeline Encasement, TxDOT/CRWA FM 1518 Transmission Line Project** ~ David Kneuper of UEG did not add new information to his written report.
  - » **TxDOT/Hays County/Crystal Clear/CRWA FM 621/CR 266 Water Line Relocation Project** ~ Mr. McMullen added construction started on July 7 and discussion with Crystal Clear on tie-ins will need to start soon.
  - » **CRWA Master Plan update** ~ Mr. Kaufman added that a meeting is scheduled for July 12 to review comments.
  - » **Wells Ranch III WTP Optimization and Conceptual Pipeline Designs** ~ David Rabago of Trihydro did not add new information to his written report.
  - » **Hays Caldwell WTP Facility Improvements:**
    - ♦ Exterior to Filter Building status report on approvals and funding ~ Byron Sanderfer with Ardurra did not add new information to Ardurra's written report.

## Item 9

### **GENERAL BUSINESS**

- A. CRWA 23-06-035 Concerning Easement Agreement with Libra Storage LLC  
*(Tabled during June 12, 2023, Board of Trustees Meeting)*  
 Adopt Resolution 23-06-035 approval of a permanent and temporary road construction easement over CRWA's Wells Ranch transmission line with Libra Storage LLC.
- » Mr. McMullen summarized the information provided in the packet but added that the access road was built for about a year.
  - » Gary Gilbert made a motion to approve Resolution 23-06-035.
  - » Mr. Schwenn seconded the motion.
  - » Vice President Rohan called for a vote. The motion passed with 14 aye votes.
- B. CRWA 23-07-042 Concerning Easement Agreement with Jen Texas 32 LLC and Isolation Valve  
 Adopt Resolution 23-07-042 approval of a permanent easement with Jen Texas 32 LLC near Lower Seguin Road in Bexar County and allow Ashton San Antonio Residential L.L.C. to deepen and reposition CRWA's 30-inch diameter water transmission line beneath a drainage channel and install a new

isolation valve.

- » Mr. McMullen summarized the information provided in the packet and stated this proposed easement was discussed briefly with the Board about 10 months ago.
  - » Mrs. Franke made a motion to approve Resolution 23-07-042.
  - » Mr. Schwenn seconded the motion.
  - » Vice President Rohan called for a vote. The motion passed with 14 aye votes.
- C. CRWA 23-07-043 Concerning Approval of a Service Order for Engineering Standards and Specifications  
Adopt Resolution 23-07-043 approval of Service Order No. 2 with Utility Engineering Group, PLLC to develop engineering standards and specifications for CRWA's horizontal infrastructure, infrastructure encroachment, easements, transmission line connections, metering, backflow protection, telemetry, and system pressure management. The Service Order provides for standard hourly rates plus reimbursement expenses with a ceiling price of \$24,760.00.
- » Vice President Rohan added that CRWA does not currently have their own set of engineering standards and specifications.
  - » Mrs. Franke made a motion to approve Resolution 23-07-043.
  - » Steven Fonville seconded the motion.
  - » Vice President Rohan called for a vote. The motion passed with 14 aye votes.

**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 The Wells Ranch II Emergency Generator Project, including status of claim asserted against Trihydro Corporation.
- » The Board did not enter into Executive Session.

**Item 11 RETURN TO OPEN MEETING**

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

**Item 12 FUTURE BOARD MEMBER AGENDA ITEMS**

- » Discussion on adding the board packets to the website.

**Item 13 Adjourn the meeting**

- » Mrs. Franke made a motion to adjourn the meeting.
- » Mrs. Miller seconded the motion.
- » Vice President Rohan adjourned the meeting at approximately 6:28 p.m.

Respectfully submitted

Doris Steubing, Secretary

**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**

<b>DATE</b>	<b>SUBJECT</b>	<b>AGENDA NUMBER</b>
08/14/2023	FINANCIAL REPORT AND CHECK REGISTER REPORT	CRWA 23-08-045

**INITIATED BY** JOAN WILKINSON

**STAFF RECOMMENDATION**

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

**BACKGROUND INFORMATION**

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

**FINANCIAL IMPACT**

None

**MOTION**

Motion to approve the following resolution.





**CANYON REGIONAL WATER AUTHORITY**

**RESOLUTION NO. 23-08-045**

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

Adopted this 14<sup>th</sup> day of August 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 June 30, 2023

	Jun 30, 23
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
1001 · First United Bank	
1006 · First United Checking #5207	3,101,095.22
1010 · First United Special #7162	2,104.21
1015 · Money Market #2160	1,082,039.29
1017 · HC SM Capacity Buy-In #6744	1,665,523.90
<b>Total 1001 · First United Bank</b>	<b>5,850,762.62</b>
1100 · First United Bank (Res)	
1105 · LD/MC Series 2016, #3017	4,051,183.26
1107 · HC 2005 #3603	9,547.71
1111 · HC Series 2017 #6074	331,631.43
1109 · HC Series 2021 #6663	580,302.36
1113 · HC Counties 2021 Ref #0636	156,711.69
1132 · Wells Ranch Series 2015, #6031	3,451,636.55
1133 · Wells Ranch Series 2016, #3009	2,918,968.98
1134 · Wells Ranch Series 2021 #0911	1,073,733.53
1140 · L/D Membrane Fund #5701	1,130,435.72
1140-01 · LD Membr-Nanostone Escrow #2545	192,906.15
1142 · H/C Membrane Fund #5693	412,027.65
1145 · Repair & Replacement Fund	3,873,955.95
<b>Total 1100 · First United Bank (Res)</b>	<b>18,183,040.98</b>
1120 · Logic	
1121 · Logic, General Funds	1,183,858.19
1127 · Wells Ranch, Construction #027	365,003.87
1158 · HC Construction	16,857,423.99
<b>Total 1120 · Logic</b>	<b>18,406,286.05</b>
1160 · BOKF, NA, Austin,WR Series 2015	123,957.01
1161 · BOKF, NA,Austin, HC Series 2017	4,092,275.69
<b>Total Checking/Savings</b>	<b>46,656,322.35</b>
<b>Accounts Receivable</b>	
1200 · Accounts Receivable	3,245,918.31
1205 · A/R, Alliance Water	
1205-01 · A/R, Alliance,Crystal Clear SUD	1,821,238.07
1205-02 · A/R, Alliance, Martindale WSC	31,588.05
1205-03 · A/R, Alliance, Green Valley SUD	1,134,207.53
1205-04 · A/R, Alliance, County Line SUD	189,827.00
<b>Total 1205 · A/R, Alliance Water</b>	<b>3,176,860.65</b>
<b>Total Accounts Receivable</b>	<b>6,422,778.96</b>
<b>Total Current Assets</b>	<b>53,079,101.31</b>
<b>Fixed Assets</b>	
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

# CANYON REGIONAL WATER AUTHORITY

## Balance Sheet

As of June 30, 2023

	Jun 30, 23
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	1,779,625.02
<b>Total 1447 · Hays Caldwell Expansion-2017</b>	<b>1,901,901.53</b>
1450 · Wells Ranch Project	
1450-01 · WellsRanch, Cap Interest	5,041,728.49
1450 · Wells Ranch Project - Other	40,885,863.75
<b>Total 1450 · Wells Ranch Project</b>	<b>45,927,592.24</b>
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
<b>Total 1451 · Wells Ranch Phase II-2011</b>	<b>15,985,526.98</b>
1452 · Wells Ranch Phase II-2015	
1452-01 · Capitalized Interest	1,930,053.69
1452 · Wells Ranch Phase II-2015 - Other	39,915,914.22
<b>Total 1452 · Wells Ranch Phase II-2015</b>	<b>41,845,967.91</b>
1453 · Wells Ranch Phase III	466,381.42
1490 · Accumulated Depreciation	-47,704,967.12
<b>Total 1400 · Capital Assets</b>	<b>135,479,469.87</b>
<b>Total Fixed Assets</b>	<b>135,479,469.87</b>
<b>Other Assets</b>	
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
<b>Total 1673 · Hays Caldwell Project</b>	<b>555,628.44</b>
1674 · Randolph Foster 10 Acres	290,837.56
1675 · Wells Ranch Project	62,061.82
1676 · Land & Land Rights	1,276,634.70
<b>Total 1670 · Land</b>	<b>2,348,406.47</b>
1703 · Water Rights	3,439,604.49
1800 · Deferred Loss on Debt Refunding	132,163.00
<b>Total Other Assets</b>	<b>6,094,922.62</b>
<b>TOTAL ASSETS</b>	<b>194,653,493.80</b>
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	
<b>Current Liabilities</b>	
Accounts Payable	
2000 · Accounts Payable	639,675.11
<b>Total Accounts Payable</b>	<b>639,675.11</b>



# CANYON REGIONAL WATER AUTHORITY

## Balance Sheet

As of June 30, 2023

	<u>Jun 30, 23</u>
<b>Other Current Liabilities</b>	
2310 · Deferred Inflow-Pension	26,892.00
2300 · Net Pension Liability	109,403.00
2002 · A/P, Misc.	96,157.60
2050 · Accrued Interest Payable	1,541,762.25
2140 · Texas Workforce	4.51
2165 · TCDRS Retirement Payable	36,969.70
	<hr/>
<b>Total Other Current Liabilities</b>	1,811,189.06
<b>Total Current Liabilities</b>	2,450,864.17
<b>Long Term Liabilities</b>	
2200 · Deferred Revenue - San Marcos	4,975,022.00
2400 · Bonds Payable	
2408 · LD/MC Tax-Exempt Series 2016	19,610,000.00
2426 · Hays Caldwell Series 2005	1,035,000.00
2430 · Hays Caldwell Series 2017	4,290,000.00
2431 · Hays Caldwell TE Series 2021	11,950,000.00
2432 · Hays Caldwell Series 2021 Ref	2,035,000.00
2443 · Wells Ranch Series 2015	35,590,000.00
2446 · Wells Ranch Series 2016	23,255,000.00
2447 · Wells Ranch Series 2021	13,270,000.00
	<hr/>
<b>Total 2400 · Bonds Payable</b>	111,035,000.00
2490 · Unamortized Premiums	6,223,387.00
	<hr/>
<b>Total Long Term Liabilities</b>	122,233,409.00
<b>Total Liabilities</b>	124,684,273.17
<b>Equity</b>	
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	11,142,165.34
	<hr/>
<b>Total Equity</b>	69,969,220.63
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<hr/> <b>194,653,493.80</b> <hr/>

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

	June 2023	October 2022 June 2023	Annual Budget	\$ Over/(Under) Annual Budget	% of Annual Budget
<b>Income</b>					
4000 · Revenues					
4002 · Debt Payments	1,073,788.31	9,664,026.09	12,766,256.11	-3,102,230.02	75.7%
4003 · Raw Water	542,043.20	4,878,173.82	6,588,316.09	-1,710,142.27	74.04%
4004 · Water-New Berlin	0.00	3,423.00	57,023.93	-53,600.93	6.0%
4009 · Membrane Replacement Fund	45,153.81	406,384.29	541,867.57	-135,483.28	75.0%
4010 · Line Use & Delivery Contracts	11,902.44	107,121.96	142,835.08	-35,713.12	75.0%
4011 · Line Use New Berlin	1,429.94	12,869.46	17,160.00	-4,290.54	75.0%
4012 · Raw Water Delivery Fees	32,701.19	257,899.18	531,234.89	-273,335.71	48.55%
4017 · Water Sales	437,993.95	3,774,945.46	5,098,170.49	-1,323,225.03	74.05%
4018 · Plant Operations	295,297.68	2,657,679.12	3,543,714.12	-886,035.00	75.0%
4020 · Repair & Replacement Funds	145,160.85	1,306,447.65	1,742,000.00	-435,552.35	75.0%
4022 · CRWA Administrative	154,108.26	1,386,974.34	1,854,409.67	-467,435.33	74.79%
4023 · Alliance Water	415,676.17	3,741,085.53	4,988,323.01	-1,247,237.48	75.0%
4024 · Interest Income General	35,321.34	266,442.01	0.00	266,442.01	100.0%
4026 · Interest Income Bond Accounts	42,741.94	234,484.27	0.00	234,484.27	100.0%
4028 · Interest Construction Accounts	89,421.85	687,274.93	0.00	687,274.93	100.0%
4030 · Other Income	1,833.90	11,644.69	0.00	11,644.69	100.0%
<b>Total 4000 · Revenues</b>	<b>3,324,574.83</b>	<b>29,396,875.80</b>	<b>37,871,310.96</b>	<b>-8,474,435.16</b>	<b>77.62%</b>
<b>Expense</b>					
5000 · Bond Repayments					
5005 · Bond Payments	1,054,602.44	9,486,288.58	12,766,256.11	-3,279,967.53	74.31%
<b>Total 5000 · Bond Repayments</b>	<b>1,054,602.44</b>	<b>9,486,288.58</b>	<b>12,766,256.11</b>	<b>-3,279,967.53</b>	<b>74.31%</b>
5500 · Water Purchases					
5501 · Raw Water Purchases	193,641.75	3,400,638.98	6,588,316.09	-3,187,677.11	51.62%
5502 · Water Purchases, New Berlin	0.00	3,423.00	57,023.93	-53,600.93	6.0%
<b>Total 5500 · Water Purchases</b>	<b>193,641.75</b>	<b>3,404,061.98</b>	<b>6,645,340.02</b>	<b>-3,241,278.04</b>	<b>51.23%</b>
5600 · Membrane Funds	40,284.00	203,695.00	541,867.57	-338,172.57	37.59%
5700 · Repair & Replacement Funds	14,009.70	427,386.09	1,742,000.00	-1,314,613.91	24.53%
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	104,135.31	138,847.08	-34,711.77	75.0%
6011 · GBRA Raw Water Delivery Fees	30,282.53	256,305.19	531,234.89	-274,929.70	48.25%
<b>Total 6000 · Line Use &amp; Delivery Costs</b>	<b>41,853.12</b>	<b>360,440.50</b>	<b>691,229.97</b>	<b>-330,789.47</b>	<b>52.15%</b>

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

	June 2023	October 2022 June 2023	Annual Budget	\$ Over/(Under) Annual Budget	% of Annual Budget
<b>7000 · Plant Expenses-Variable Costs</b>					
7005 · Plant Utilities	247,077.11	2,130,506.39	2,937,210.46	-806,704.07	72.54%
7010 · Chemicals	206,772.83	1,867,379.76	2,167,460.03	-300,080.27	86.16%
<b>Total 7000 · Plant Expenses-Variable Costs</b>	<b>453,849.94</b>	<b>3,997,886.15</b>	<b>5,104,670.49</b>	<b>-1,106,784.34</b>	<b>78.32%</b>
<b>7100 · Operating Expenses</b>					
7115 · Plant Maintenance & Supplies	260,085.63	733,295.81	1,250,000.00	-516,704.19	58.66%
7116 · Generator Maintenance	567.94	44,684.92	124,850.00	-80,165.08	35.79%
7117 · Equipment rental	1,012.48	30,107.08	33,300.00	-3,192.92	90.41%
7120 · SCADA	2,780.00	67,470.97	205,000.00	-137,529.03	32.91%
7122 · Vehicle Operations	2,109.35	30,815.49	90,000.00	-59,184.51	34.24%
7125 · Grounds Maintenance	9,893.36	90,461.75	118,630.00	-28,168.25	76.26%
7131 · Permits and Fees	0.00	27,040.12	20,550.00	6,490.12	131.58%
7135 · Lab Supplies & Testing Fees	8,688.79	79,541.77	125,700.00	-46,158.23	63.28%
7140 · Insurance	0.00	99,459.38	103,964.46	-4,505.08	96.67%
7150 · Meals & Functions	4,345.37	28,579.82	35,000.00	-6,420.18	81.66%
7155 · Memberships & Dues	200.00	9,257.00	6,550.00	2,707.00	141.33%
7160 · Mileage	3,443.35	28,623.24	31,250.00	-2,626.76	91.59%
7162 · Office Supplies and Expense	-868.17	18,646.89	27,000.00	-8,353.11	69.06%
7165 · Training	0.00	2,458.19	11,500.00	-9,041.81	21.38%
7170 · Clothing	0.00	3,300.00	4,200.00	-900.00	78.57%
7175 · Telephones	364.64	3,293.06	4,500.00	-1,206.94	73.18%
7180 · Mobile Telephones	1,214.43	10,805.05	14,900.00	-4,094.95	72.52%
7190 · Network Expenses	-1,326.15	5,632.85	7,000.00	-1,367.15	80.47%
7191 · Internet Domain	125.64	3,359.26	4,000.00	-640.74	83.98%
7195 · Contract Labor	0.00	0.00	4,000.00	-4,000.00	0.0%
7196 · GW Transport/Pumping Fees	15,288.55	232,563.56	280,000.00	-47,436.44	83.06%
<b>Total 7100 · Operating Expenses</b>	<b>307,925.21</b>	<b>1,549,396.21</b>	<b>2,501,894.46</b>	<b>-952,498.25</b>	<b>61.93%</b>
<b>7500 · Payroll Expenses</b>					
7505 · Annual Pay	168,556.26	1,065,755.64	1,570,212.20	-504,456.56	67.87%
7510 · Overtime	13,140.33	62,698.43	111,735.39	-49,036.96	56.11%
7530 · On Call	420.00	1,732.57	10,920.00	-9,187.43	15.87%
<b>Total 7500 · Payroll Expenses</b>	<b>182,116.59</b>	<b>1,130,186.64</b>	<b>1,692,867.59</b>	<b>-562,680.95</b>	<b>66.76%</b>
<b>7600 · Employee Benefits</b>					
7605 · Payroll Taxes	13,221.58	81,955.48	131,160.35	-49,204.87	62.49%
7610 · Insurance	10,005.52	121,208.25	192,000.00	-70,791.75	63.13%
7615 · Retirement	24,221.52	143,729.04	225,151.39	-81,422.35	63.84%
<b>Total 7600 · Employee Benefits</b>	<b>47,448.62</b>	<b>346,892.77</b>	<b>548,311.74</b>	<b>-201,418.97</b>	<b>63.27%</b>



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

	June 2023	October 2022 June 2023	Annual Budget	\$ Over/(Under) Annual Budget	% of Annual Budget
<b>7800 · Professional Fees</b>					
7801 · SEC Disclosure	0.00	0.00	2,250.00	-2,250.00	0.0%
7802 · Bank Service Fees	0.00	139.00	200.00	-61.00	69.5%
7803 · 401(k) Plan Fees	0.00	1,307.50	2,000.00	-692.50	65.38%
7806 · Bond Fees	800.00	2,000.00	3,000.00	-1,000.00	66.67%
7805 · Legal Fees	11,138.85	287,664.07	275,000.00	12,664.07	104.61%
7810 · Engineering	12,120.00	159,127.05	350,000.00	-190,872.95	45.47%
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%
<b>Total 7800 · Professional Fees</b>	<b>24,058.85</b>	<b>465,062.62</b>	<b>648,550.00</b>	<b>-183,487.38</b>	<b>71.71%</b>
<b>7823 · Alliance Water</b>	<b>0.00</b>	<b>3,599,663.83</b>	<b>4,988,323.01</b>	<b>-1,388,659.18</b>	<b>72.16%</b>
<b>Total Expense</b>	<b>2,359,790.22</b>	<b>24,970,960.37</b>	<b>37,871,310.96</b>	<b>-12,900,350.59</b>	<b>65.94%</b>
<b>Net Ordinary Income</b>	<b>964,764.61</b>	<b>4,425,915.43</b>	<b>0.00</b>	<b>4,425,915.43</b>	<b>100.0%</b>
<b>Other Income/Expense</b>					
Other Income					
8000 · Bond Payment Principal	746,249.99	6,716,249.91	0.00	0.00	100.0%
<b>Net Other Income/Expense</b>	<b>746,249.99</b>	<b>6,716,249.91</b>	<b>0.00</b>	<b>6,716,249.91</b>	<b>100.0%</b>
<b>Net Income</b>	<b>1,711,034.60</b>	<b>11,142,165.34</b>	<b>0.00</b>	<b>11,142,165.34</b>	<b>100.0%</b>

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

	Oct '22 - Jun 23	Oct '21 - Jun 22	\$ Change	% Change
<b>Ordinary Income/Expense</b>				
<b>Income</b>				
4000 · Revenues				
4002 · Debt Payments	9,664,026.09	8,749,840.80	914,185.29	10.5%
4003 · Raw Water	4,878,173.82	3,441,529.53	1,436,644.29	41.7%
4004 · Water-New Berlin	3,423.00	4,187.20	-764.20	-18.3%
4009 · Membrane Replacement Fund	406,384.29	73,330.92	333,053.37	454.2%
4010 · Line Use & Delivery Contracts	107,121.96	324,080.88	-216,958.92	-67.0%
4011 · Line Use New Berlin	12,869.46	12,869.46	0.00	0.0%
4012 · Raw Water Delivery Fees	257,899.18	0.00	257,899.18	100.0%
4017 · Water Sales	3,774,945.46	2,990,855.83	784,089.63	26.2%
4018 · Plant Operations	2,657,679.12	2,190,676.86	467,002.26	21.3%
4020 · Repair & Replacement Funds	1,306,447.65	749,969.91	556,477.74	74.2%
4022 · CRWA Administrative	1,386,974.34	1,086,196.59	300,777.75	27.7%
4023 · Alliance Water	3,741,085.53	3,428,492.76	312,592.77	9.1%
4024 · Interest Income General	266,442.01	35,047.87	231,394.14	660.2%
4026 · Interest Income Bond Accounts	234,484.27	32,308.20	202,176.07	625.8%
4028 · Interest Construction Accounts	687,274.93	47,424.71	639,850.22	1,349.2%
4030 · Other Income	11,644.69	13,756.58	-2,111.89	-15.4%
<b>Total 4000 · Revenues</b>	<b>29,396,875.80</b>	<b>23,180,568.10</b>	<b>6,216,307.70</b>	<b>26.8%</b>
<b>Total Income</b>	<b>29,396,875.80</b>	<b>23,180,568.10</b>	<b>6,216,307.70</b>	<b>26.8%</b>
<b>Gross Profit</b>	<b>29,396,875.80</b>	<b>23,180,568.10</b>	<b>6,216,307.70</b>	<b>26.8%</b>
<b>Expense</b>				
5000 · Bond Repayments				
5005 · Bond Payments	9,486,288.58	9,280,426.77	205,861.81	2.2%
<b>Total 5000 · Bond Repayments</b>	<b>9,486,288.58</b>	<b>9,280,426.77</b>	<b>205,861.81</b>	<b>2.2%</b>
5500 · Water Purchases				
5501 · Raw Water Purchases	3,400,638.98	2,879,958.95	520,680.03	18.1%
5502 · Water Purchases, New Berlin	3,423.00	4,187.20	-764.20	-18.3%
<b>Total 5500 · Water Purchases</b>	<b>3,404,061.98</b>	<b>2,884,146.15</b>	<b>519,915.83</b>	<b>18.0%</b>
5600 · Membrane Funds	203,695.00	133.64	203,561.36	152,320.7%
5700 · Repair & Replacement Funds	427,386.09	74,633.34	352,752.75	472.7%
6000 · Line Use & Delivery Costs				
6010 · Line Contract GBRA	104,135.31	316,602.10	-212,466.79	-67.1%
6011 · GBRA Raw Water Delivery Fees	256,305.19	0.00	256,305.19	100.0%
<b>Total 6000 · Line Use &amp; Delivery Costs</b>	<b>360,440.50</b>	<b>316,602.10</b>	<b>43,838.40</b>	<b>13.9%</b>
7000 · Plant Expenses-Variable Costs				
7005 · Plant Utilities	2,130,506.39	1,724,311.03	406,195.36	23.6%
7010 · Chemicals	1,867,379.76	1,343,798.26	523,581.50	39.0%
<b>Total 7000 · Plant Expenses-Variable Costs</b>	<b>3,997,886.15</b>	<b>3,068,109.29</b>	<b>929,776.86</b>	<b>30.3%</b>
7100 · Operating Expenses				
7115 · Plant Maintenance & Supplies	733,295.81	668,064.95	65,230.86	9.8%
7116 · Generator Maintenance	44,684.92	54,587.66	-9,902.74	-18.1%
7117 · Equipment rental	30,107.08	24,721.62	5,385.46	21.8%
7120 · SCADA	67,470.97	192,460.95	-124,989.98	-64.9%
7122 · Vehicle Operations	30,815.49	20,176.03	10,639.46	52.7%
7125 · Grounds Maintenance	90,461.75	73,774.66	16,687.09	22.6%
7131 · Permits and Fees	27,040.12	22,780.48	4,259.64	18.7%
7135 · Lab Supplies & Testing Fees	79,541.77	86,123.02	-6,581.25	-7.6%
7140 · Insurance	99,459.38	84,138.18	15,321.20	18.2%
7150 · Meals & Functions	28,579.82	24,849.58	3,730.24	15.0%
7155 · Memberships & Dues	9,257.00	4,527.00	4,730.00	104.5%
7160 · Mileage	28,623.24	19,520.17	9,103.07	46.6%
7162 · Office Supplies and Expense	18,646.89	17,485.31	1,161.58	6.6%
7165 · Training	2,458.19	8,188.89	-5,730.70	-70.0%
7170 · Clothing	3,300.00	3,000.00	300.00	10.0%
7175 · Telephones	3,293.06	3,824.27	-531.21	-13.9%
7180 · Mobile Telephones	10,805.05	11,856.92	-1,051.87	-8.9%
7190 · Network Expenses	5,632.85	5,632.49	0.36	0.0%
7191 · Internet Domain	3,359.26	3,722.42	-363.16	-9.8%
7196 · GW Transport/Pumping Fees	232,563.56	189,562.66	43,000.90	22.7%
<b>Total 7100 · Operating Expenses</b>	<b>1,549,396.21</b>	<b>1,518,997.26</b>	<b>30,398.95</b>	<b>2.0%</b>
7500 · Payroll Expenses				
7505 · Annual Pay	1,065,755.64	848,881.84	216,873.80	25.6%
7510 · Overtime	62,698.43	65,288.29	-2,589.86	-4.0%
7530 · On Call	1,732.57	7,620.00	-5,887.43	-77.3%
<b>Total 7500 · Payroll Expenses</b>	<b>1,130,186.64</b>	<b>921,790.13</b>	<b>208,396.51</b>	<b>22.6%</b>
7600 · Employee Benefits				
7605 · Payroll Taxes	81,955.48	67,029.72	14,925.76	22.3%
7610 · Insurance	121,208.25	103,294.75	17,913.50	17.3%
7615 · Retirement	143,729.04	96,378.29	47,350.75	49.1%
<b>Total 7600 · Employee Benefits</b>	<b>346,892.77</b>	<b>266,702.76</b>	<b>80,190.01</b>	<b>30.1%</b>

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

	Oct '22 - Jun 23	Oct '21 - Jun 22	\$ Change	% Change
<b>7800 · Professional Fees</b>				
7801 · SEC Disclosure	0.00	2,250.00	-2,250.00	-100.0%
7802 · Bank Service Fees	139.00	151.00	-12.00	-8.0%
7803 · 401(k) Plan Fees	1,307.50	1,527.50	-220.00	-14.4%
7806 · Bond Fees	2,000.00	2,000.00	0.00	0.0%
7805 · Legal Fees	287,664.07	94,799.96	192,864.11	203.4%
7810 · Engineering	159,127.05	227,667.46	-68,540.41	-30.1%
7820 · Accounting & Audit	14,825.00	14,400.00	425.00	3.0%
<b>Total 7800 · Professional Fees</b>	465,062.62	342,795.92	122,266.70	35.7%
<b>7823 · Alliance Water</b>	3,599,663.83	3,428,636.67	171,027.16	5.0%
<b>Total Expense</b>	24,970,960.37	22,102,974.03	2,867,986.34	13.0%
<b>Net Ordinary Income</b>	4,425,915.43	1,077,594.07	3,348,321.36	310.7%
<b>Other Income/Expense</b>				
Other Income				
8000 · Bond Payment Principal	6,716,249.91	6,266,249.93	449,999.98	7.2%
<b>Total Other Income</b>	6,716,249.91	6,266,249.93	449,999.98	7.2%
<b>Net Other Income</b>	6,716,249.91	6,266,249.93	449,999.98	7.2%
<b>Net Income</b>	<b>11,142,165.34</b>	<b>7,343,844.00</b>	<b>3,798,321.34</b>	<b>51.7%</b>



**CANYON REGIONAL WATER AUTHORITY**  
**Monthly General Account Check Register**  
**As of June 30, 2023**

Type	Date	Num	Name	Memo	Amount	Balance
<b>1001 - First United Bank</b>						2,335,623.51
<b>1006 - First United Checking #5207</b>						2,335,623.51
Paycheck	06/02/2023	Direc...	Allman, Michael		-2,653.62	2,332,969.89
Paycheck	06/02/2023	Direc...	Cruz, Edward D		-1,532.62	2,331,437.27
Paycheck	06/02/2023	Direc...	Flores, Jimmy		-2,174.29	2,329,262.98
Paycheck	06/02/2023	Direc...	Kirkland, Debra M		-1,521.28	2,327,741.70
Paycheck	06/02/2023	Direc...	McKnight III, John R.		-473.88	2,327,267.82
Paycheck	06/02/2023	Direc...	Moreno, Joe		-3,125.50	2,324,142.32
Paycheck	06/02/2023	Direc...	Powers, Frantiska A		-1,530.71	2,322,611.61
Paycheck	06/02/2023	Direc...	Saldana, Michael A		-1,459.09	2,321,152.52
Paycheck	06/02/2023	Direc...	Shirk, Austin		-1,724.72	2,319,427.80
Paycheck	06/02/2023	Direc...	Sims, Clarissa R		-1,854.17	2,317,573.63
Paycheck	06/02/2023	Direc...	Wallace, Russell L		-1,958.66	2,315,614.97
Paycheck	06/02/2023	Direc...	Whitelatch, Jr., Richard L		-1,355.03	2,314,259.94
Paycheck	06/02/2023	Direc...	Kaufman, John M		-4,723.69	2,309,536.25
Paycheck	06/02/2023	Direc...	McMullen, David W.		-3,527.74	2,306,008.51
Paycheck	06/02/2023	Direc...	Ramos, Humberto		-3,130.76	2,302,877.75
Paycheck	06/02/2023	Direc...	Telfer, Adam C		-3,280.76	2,299,596.99
Paycheck	06/02/2023	Direc...	Wilkinson, Joan A.		-3,178.78	2,296,418.21
Liability Check	06/02/2023	ACH	John Hancock	401(k) Retirement Plan	-1,253.12	2,295,165.09
Liability Check	06/02/2023	EFTPS	US Treasury	74-2586063	-14,619.90	2,280,545.19
Liability Check	06/02/2023	36736	California State Disburse...	200000001098628	-449.07	2,280,096.12
Liability Check	06/02/2023	36737	Office of the Attorney Gene...	AG# 0012809999	-489.69	2,279,606.43
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Big Oaks	04/07/2023-05/08/2023	-28.00	2,279,578.43
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Bond East Well	04/07/2023-05/08/2023	-561.10	2,279,017.33
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Bond West Well	04/07/2023-05/08/2023	-3,215.12	2,275,802.21
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Bull Trap Well	04/07/2023-05/08/2023	-1,984.00	2,273,818.21
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Camphouse Well	04/07/2023-05/08/2023	-2,913.00	2,270,905.21
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Chicken House Well	04/07/2023-05/08/2023	-2,402.37	2,268,502.84
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Christian East Well	04/07/2023-05/08/2023	-2,662.90	2,265,839.94
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Christian West Well	04/07/2023-05/08/2023	-3,134.19	2,262,705.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Cibolo	04/07/2023-05/08/2023	-28.00	2,262,677.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Coastal Field Well	04/07/2023-05/08/2023	-2,314.00	2,260,363.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Damerau	04/07/2023-05/08/2023	-57.00	2,260,306.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Deadman Tank Well	04/07/2023-05/08/2023	-10,502.00	2,249,804.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Deer Stand Well	04/07/2023-05/08/2023	-8,863.00	2,240,941.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - FM 467	04/07/2023-05/08/2023	-30.00	2,240,911.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Green Valley	04/07/2023-05/08/2023	-29.00	2,240,882.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - GV 7293 IH 10	04/07/2023-05/08/2023	-31.00	2,240,851.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Hardy Road	04/07/2023-05/08/2023	-30.00	2,240,821.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Hickory Forest	04/07/2023-05/08/2023	-53.00	2,240,768.75
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Littlefield Well	04/07/2023-05/08/2023	-3,265.41	2,237,503.34
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Marion	04/07/2023-05/08/2023	-27.00	2,237,476.34
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Pig Trap Well	04/07/2023-05/08/2023	-1,951.00	2,235,525.34
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Pivot Irrigation	04/07/2023-05/08/2023	-62.00	2,235,463.34
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Tommys Well	04/07/2023-05/08/2023	-205.00	2,235,258.34
Bill Pmt -Che...	06/02/2023	ACH	GVEC - Wagner Booster St...	04/07/2023-05/08/2023	-1,160.81	2,234,097.53
Bill Pmt -Che...	06/02/2023	36738	Anytime Fuel Pros LLC	Diesel for Generators...	-2,792.18	2,231,305.35
Bill Pmt -Che...	06/02/2023	36739	Bay Area/General Crane S...	Crane Inspections	-574.30	2,230,731.05
Bill Pmt -Che...	06/02/2023	36740	Brenntag Southwest, Inc.	Chemicals	-19,099.50	2,211,631.55
Bill Pmt -Che...	06/02/2023	36741	Council Automotive Supply	Cartridge Lift Repairs	-214.39	2,211,417.16
Bill Pmt -Che...	06/02/2023	36742	Crimcheck	New Hire Background	-45.15	2,211,372.01
Bill Pmt -Che...	06/02/2023	36743	Gold Star Exterminators	Pest Control	-348.00	2,211,024.01
Bill Pmt -Che...	06/02/2023	36744	Guadalupe County Ground...	GW Transport/Pumpi...	-15,288.55	2,195,735.46
Bill Pmt -Che...	06/02/2023	36745	Lhoist North America of Te...	Lime	-7,321.56	2,188,413.90
Bill Pmt -Che...	06/02/2023	36746	Matheson Tri-Gas, Inc.	Oxygen & Tank Inspe...	-8,275.59	2,180,138.31
Bill Pmt -Che...	06/02/2023	36747	New Braunfels Welders Su...	Nitrogen	-46.84	2,180,091.47
Bill Pmt -Che...	06/02/2023	36748	Texas Land and Right of W...	Wells Ranch Water L...	-2,340.00	2,177,751.47
Bill Pmt -Che...	06/02/2023	36749	U.S. Signs	Confined Space Signs	-150.00	2,177,601.47
Bill Pmt -Che...	06/02/2023	36750	Waste Management	Garbage Disposal	-1,233.82	2,176,367.65
Bill Pmt -Che...	06/02/2023	36751	Williams Supply Company	Parts	-653.43	2,175,714.22
Transfer	06/05/2023			5S-WR Move Clearw...	17,275.00	2,192,989.22
Transfer	06/07/2023			Pall Trailer	11,500.00	2,204,489.22
Transfer	06/07/2023			Pall Trailer - HL Equi...	2,958.00	2,207,447.22
Deposit	06/08/2023			Deposit	728,757.50	2,936,204.72
Bill Pmt -Che...	06/09/2023	ACH	Texas Fleet Fuel	Vehicle/Equipment F...	-995.53	2,935,209.19
Bill Pmt -Che...	06/09/2023	36752	ACT Pipe and Supply, Inc.	Parts	-3,316.14	2,931,893.05
Bill Pmt -Che...	06/09/2023	36753	Armadillo Lawn Care & Irrig...	Lawn Maintenance	-6,121.34	2,925,771.71



**CANYON REGIONAL WATER AUTHORITY**  
**Monthly General Account Check Register**  
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Type	Date	Num	Name	Memo	Amount	Balance
Bill Pmt -Che...	06/09/2023	36754	Attorney R. L. Wilson	Reimb S. Kanetzky E...	-661.13	2,925,110.58
Bill Pmt -Che...	06/09/2023	36755	Callis Professional Service...	Office Cleaning	-370.70	2,924,739.88
Bill Pmt -Che...	06/09/2023	36756	Citibank, N.A.	Mastercard	-8,000.07	2,916,739.81
Bill Pmt -Che...	06/09/2023	36757	Dex Imaging	Admin Copier	-732.18	2,916,007.63
Bill Pmt -Che...	06/09/2023	36758	DLP Utility Services	Pipeline Leaks & Rep...	-62,300.00	2,853,707.63
Bill Pmt -Che...	06/09/2023	36759	DPC Industries	Chlorine	-3,336.80	2,850,370.83
Bill Pmt -Che...	06/09/2023	36760	Dynamic Mechanical Contr...	A/C Repair @ 1604	-325.00	2,850,045.83
Bill Pmt -Che...	06/09/2023	36761	Fastest Labs of New Braunf...	New Employee Drug ...	-45.00	2,850,000.83
Bill Pmt -Che...	06/09/2023	36762	Hawkins	Chemicals	-14,223.71	2,835,777.12
Bill Pmt -Che...	06/09/2023	36763	Hierholzer Engineering, Inc	SCADA	-2,780.00	2,832,997.12
Bill Pmt -Che...	06/09/2023	36764	HL Equipment, Inc.	Fork Lift for Pall Equi...	-2,958.00	2,830,039.12
Bill Pmt -Che...	06/09/2023	36765	Hofmann's Supply	Cylinder Rental	-14.98	2,830,024.14
Bill Pmt -Che...	06/09/2023	36766	Law Offices of Patricia Erlin...	Groundwater Permitti...	-539.00	2,829,485.14
Bill Pmt -Che...	06/09/2023	36767	Lhoist North America of Te...	Lime	-7,040.61	2,822,444.53
Bill Pmt -Che...	06/09/2023	36768	Louis T. Rosenberg	Legal Fees	-8,180.40	2,814,264.13
Bill Pmt -Che...	06/09/2023	36769	Matheson Tri-Gas, Inc.	Cylinder Rental	-2,693.96	2,811,570.17
Bill Pmt -Che...	06/09/2023	36770	New Braunfels Welders Su...	Cylinder Rental	-7.50	2,811,562.67
Bill Pmt -Che...	06/09/2023	36771	Standard Insurance Compa...	Dental Insurance	-1,413.08	2,810,149.59
Bill Pmt -Che...	06/09/2023	36772	Texas Excavation Safety S...	Texas 811	-223.25	2,809,926.34
Bill Pmt -Che...	06/09/2023	36773	Vantage Pump and Compr...	Compressor PM	-1,056.64	2,808,869.70
Bill Pmt -Che...	06/09/2023	36774	Waste Connections	Garbage Disposal	-377.17	2,808,492.53
Bill Pmt -Che...	06/09/2023	36775	Williams Supply Company	Parts	-51.46	2,808,441.07
Bill Pmt -Che...	06/09/2023	36776	David McMullen	May Mileage & Phon...	-2,810.02	2,805,631.05
Deposit	06/12/2023			Deposit	280,934.82	3,086,565.87
Deposit	06/13/2023			Deposit	1,550.58	3,088,116.45
Transfer	06/14/2023			Pall Trailer Rental Pa...	40,284.00	3,128,400.45
Liability Check	06/15/2023	ACH	TCDRS		-12,106.12	3,116,294.33
Liability Check	06/15/2023	ACH	TCDRS		-12,001.85	3,104,292.48
Bill Pmt -Che...	06/15/2023	ACH	CPS - I 10	I-10 Utilities	-11.79	3,104,280.69
Paycheck	06/16/2023	Direc...	Allman, Michael		-2,699.54	3,101,581.15
Paycheck	06/16/2023	Direc...	Cruz, Edward D		-1,610.70	3,099,970.45
Paycheck	06/16/2023	Direc...	Kirkland, Debra M		-1,964.37	3,098,006.08
Paycheck	06/16/2023	Direc...	McKnight III, John R.		-1,451.54	3,096,554.54
Paycheck	06/16/2023	Direc...	Moreno, Joe		-3,153.69	3,093,400.85
Paycheck	06/16/2023	Direc...	Powers, Frantiska A		-1,512.79	3,091,888.06
Paycheck	06/16/2023	Direc...	Saldana, Michael A		-1,468.38	3,090,419.68
Paycheck	06/16/2023	Direc...	Shirk, Austin		-2,349.66	3,088,070.02
Paycheck	06/16/2023	Direc...	Sims, Clarissa R		-1,411.78	3,086,658.24
Paycheck	06/16/2023	Direc...	Wallace, Russell L		-1,558.91	3,085,099.33
Paycheck	06/16/2023	Direc...	Whitelatch, Jr., Richard L		-1,378.78	3,083,720.55
Paycheck	06/16/2023	Direc...	Flores, Jimmy		-2,059.25	3,081,661.30
Paycheck	06/16/2023	Direc...	Kaufman, John M		-4,723.69	3,076,937.61
Paycheck	06/16/2023	Direc...	McMullen, David W.		-3,527.74	3,073,409.87
Paycheck	06/16/2023	Direc...	Ramos, Humberto		-3,130.75	3,070,279.12
Paycheck	06/16/2023	Direc...	Telfer, Adam C		-3,280.76	3,066,998.36
Paycheck	06/16/2023	Direc...	Wilkinson, Joan A.		-3,178.78	3,063,819.58
Liability Check	06/16/2023	ACH	John Hancock	401(k) Retirement Plan	-1,272.78	3,062,546.80
Liability Check	06/16/2023	EFTPS	US Treasury	74-2586063	-15,172.80	3,047,374.00
Bill Pmt -Che...	06/16/2023	36777	5S Service Company LLC	Well #4 Repairs	-1,025.60	3,046,348.40
Bill Pmt -Che...	06/16/2023	36778	Aflac	Employee Voluntary I...	-1,161.36	3,045,187.04
Bill Pmt -Che...	06/16/2023	36779	Analytical Environmental La...	Lab Testing	-135.00	3,045,052.04
Bill Pmt -Che...	06/16/2023	36780	Attorney R. L. Wilson	Legal Fees	-16,175.88	3,028,876.16
Bill Pmt -Che...	06/16/2023	36781	Brenntag Southwest, Inc.	Chemicals	-11,487.00	3,017,389.16
Bill Pmt -Che...	06/16/2023	36782	Charter Communications	HC Internet	-125.64	3,017,263.52
Bill Pmt -Che...	06/16/2023	36783	DLP Utility Services	Repairs	-9,500.00	3,007,763.52
Bill Pmt -Che...	06/16/2023	36784	DPC Industries-Cylinder Re...	Cylinder Rental	-990.00	3,006,773.52
Bill Pmt -Che...	06/16/2023	36785	DSHS Central Lab MC2004	Lab Fees	-554.66	3,006,218.86
Bill Pmt -Che...	06/16/2023	36786	Dynamic Mechanical Contr...	A/C Repair @ 1604	-1,355.72	3,004,863.14
Bill Pmt -Che...	06/16/2023	36787	Garrison Comal Supply, LLC	Parts	-53.76	3,004,809.38
Bill Pmt -Che...	06/16/2023	36788	GBRA-Raw Water & TM	12613 A/F @ \$165 &...	-233,494.87	2,771,314.51
Bill Pmt -Che...	06/16/2023	36789	Hach Co.	Lab Supplies	-1,047.00	2,770,267.51
Bill Pmt -Che...	06/16/2023	36790	Hawkins	Chemicals	-24,447.79	2,745,819.72
Bill Pmt -Che...	06/16/2023	36791	Helping Hand Hardware	Maintenance Supplies	-20.78	2,745,798.94
Bill Pmt -Che...	06/16/2023	36792	Lhoist North America of Te...	Lime	-7,310.08	2,738,488.86
Bill Pmt -Che...	06/16/2023	36793	Louis T. Rosenberg	Legal Fees	-4,725.50	2,733,763.36
Bill Pmt -Che...	06/16/2023	36794	Pall Corporation	5th Installment Paym...	-40,284.00	2,693,479.36
Bill Pmt -Che...	06/16/2023	36795	Pollution Control Services	Lab Testing	-3,066.00	2,690,413.36
Bill Pmt -Che...	06/16/2023	36796	Sam's Club MC/SYNCB	Supplies	-887.49	2,689,525.87
Bill Pmt -Che...	06/16/2023	36797	South Texas Wastewater	LD Septic Tank Repa...	-32.00	2,689,493.87



**CANYON REGIONAL WATER AUTHORITY**  
**Monthly General Account Check Register**  
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Type	Date	Num	Name	Memo	Amount	Balance
Bill Pmt -Che...	06/16/2023	36798	Trihydro Corporation	Engineering Fees	-68,799.75	2,620,694.12
Bill Pmt -Che...	06/16/2023	36799	UMB Bank, N.A.	Bond Fees	-800.00	2,619,894.12
Bill Pmt -Che...	06/16/2023	36800	Utility Engineering Group, P...	Engineering Fees	-5,145.00	2,614,749.12
Bill Pmt -Che...	06/16/2023	36801	Wastewater Transport Serv...	Sludge Removal	-15,245.59	2,599,503.53
Bill Pmt -Che...	06/16/2023	36802	Williams Supply Company	Parts	-3,039.63	2,596,463.90
Bill Pmt -Che...	06/16/2023	36803	Hild Brothers, Inc.	Weed Killer	-140.00	2,596,323.90
Liability Check	06/16/2023	36804	California State Disbursem...	200000001098628	-449.07	2,595,874.83
Liability Check	06/16/2023	36805	Office of the Attorney Gene...	AG# 0012809999	-489.69	2,595,385.14
Bill Pmt -Che...	06/20/2023	ACH	GVEC - Lake Dunlap	04/25/2023-05/25/2023	-53,093.39	2,542,291.75
Bill Pmt -Che...	06/20/2023	ACH	GVEC - Leissner Booster S...	04/25/2023-05/25/2023	-5,066.55	2,537,225.20
Bill Pmt -Che...	06/20/2023	ACH	GVEC - Leissner Rd Boost...	04/25/2023-05/25/2023	-15,042.51	2,522,182.69
Bill Pmt -Che...	06/20/2023	ACH	GVEC - Wagner Booster	04/25/2023-05/25/2023	-17,793.71	2,504,388.98
Bill Pmt -Che...	06/20/2023	ACH	GVEC - WR Plant	04/25/2023-05/25/2023	-13,976.71	2,490,412.27
Bill Pmt -Che...	06/20/2023	ACH	GVEC - WR Plant #2	04/25/2023-05/25/2023	-11,301.21	2,479,111.06
Deposit	06/20/2023			Deposit	1,110,484.51	3,589,595.57
Bill Pmt -Che...	06/21/2023	ACH	Bluebonnet Electric	HC Utilities	-17,105.67	3,572,489.90
Bill Pmt -Che...	06/21/2023	ACH	CPS - 1518	Utilities	-126.23	3,572,363.67
Transfer	06/21/2023			Funds Transfer	-44,958.43	3,527,405.24
Transfer	06/21/2023			Funds Transfer	-28,559.65	3,498,845.59
Transfer	06/21/2023			Funds Transfer	-53,348.21	3,445,497.38
Transfer	06/21/2023			Funds Transfer	-18,294.56	3,427,202.82
Transfer	06/21/2023			LD-Monthly Bond Pa...	-148,238.65	3,278,964.17
Transfer	06/21/2023			Bond Payment Trans...	-24,182.49	3,254,781.68
Transfer	06/21/2023			MC-Bond Payment T...	-154,239.46	3,100,542.22
Transfer	06/21/2023			Bond Payment Trans...	-553.23	3,099,988.99
Transfer	06/21/2023			Bond Payment Trans...	-33,386.91	3,066,602.08
Transfer	06/21/2023			Bond Payment Trans...	-58,928.72	3,007,673.36
Transfer	06/21/2023			Bond Payment Trans...	-14,768.85	2,992,904.51
Transfer	06/21/2023			Bond Payment Trans...	-259,041.10	2,733,863.41
Transfer	06/21/2023			Bond Payment Trans...	-249,466.88	2,484,396.53
Transfer	06/21/2023			Bond Payment Trans...	-98,519.91	2,385,876.62
Transfer	06/21/2023			Bond Payment Trans...	-22,479.93	2,363,396.69
Transfer	06/21/2023			Bond Payment Trans...	-9,982.18	2,353,414.51
Transfer	06/21/2023			Monthly Membrane T...	-5,155.41	2,348,259.10
Transfer	06/21/2023			Monthly Membrane T...	-39,998.40	2,308,260.70
Transfer	06/21/2023			Funds Transfer	-0.13	2,308,260.57
Transfer	06/21/2023			Funds Transfer	-6.83	2,308,253.74
Bill Pmt -Che...	06/23/2023	ACH	Texas Fleet Fuel	Vehicle/Equipment F...	-1,058.43	2,307,195.31
Bill Pmt -Che...	06/23/2023	36806	Anytime Fuel Pros LLC	VOID: Diesel for Gen...	0.00	2,307,195.31
Bill Pmt -Che...	06/23/2023	36807	AT&T Mobility	VOID: Mobile Phone ...	0.00	2,307,195.31
Bill Pmt -Che...	06/23/2023	36808	ATCO International	Plant Supplies	-690.00	2,306,505.31
Bill Pmt -Che...	06/23/2023	36809	Avesis	VOID: Employee Visi...	0.00	2,306,505.31
Bill Pmt -Che...	06/23/2023	36810	DPC Industries	VOID: Chlorine	0.00	2,306,505.31
Bill Pmt -Che...	06/23/2023	36811	Dynamic Mechanical Contr...	A/C Repairs	-2,110.33	2,304,394.98
Bill Pmt -Che...	06/23/2023	36812	Frantiska Powers	Mileage Reimburse...	-168.34	2,304,226.64
Bill Pmt -Che...	06/23/2023	36813	Guadalupe-Blanco River A...	VOID: Lab Testing	0.00	2,304,226.64
Bill Pmt -Che...	06/23/2023	36814	Hach Co.	Lab Supplies	-2,087.29	2,302,139.35
Bill Pmt -Che...	06/23/2023	36815	Hawkins	Chemicals	-12,568.50	2,289,570.85
Bill Pmt -Che...	06/23/2023	36816	Lhoist North America of Te...	Lime	-7,123.52	2,282,447.33
Bill Pmt -Che...	06/23/2023	36817	Matheson Tri-Gas, Inc.	Nitrogen	-1,170.12	2,281,277.21
Bill Pmt -Che...	06/23/2023	36818	New Braunfels Utilities	VOID: 46 Standpipe ...	0.00	2,281,277.21
Bill Pmt -Che...	06/23/2023	36819	Pierson Process Technolog...	Ozone Parts	-35,484.65	2,245,792.56
Bill Pmt -Che...	06/23/2023	36820	Pye-Barker Fire & Safety, L...	Fire Extinguisher Ins...	-222.75	2,245,569.81
Bill Pmt -Che...	06/23/2023	36821	TML Health	VOID: Employee Hea...	0.00	2,245,569.81
Bill Pmt -Che...	06/23/2023	36822	Verve Cloud, Inc.	VOID: Telephone	0.00	2,245,569.81
Bill Pmt -Che...	06/23/2023	36823	Williams Supply Company	VOID: Ozone Parts	0.00	2,245,569.81
Deposit	06/26/2023			Deposit	753,865.42	2,999,435.23
Bill Pmt -Che...	06/26/2023	ACH	CPS - 1604	Utilities	-23,579.56	2,975,855.67
Deposit	06/27/2023			Deposit	330,656.50	3,306,512.17
Paycheck	06/30/2023	Direc...	Allman, Michael		-2,982.41	3,303,529.76
Paycheck	06/30/2023	Direc...	Cruz, Edward D		-1,321.18	3,302,208.58
Paycheck	06/30/2023	Direc...	Flores, Jimmy		-2,279.65	3,299,928.93
Paycheck	06/30/2023	Direc...	Kirkland, Debra M		-1,521.27	3,298,407.66
Paycheck	06/30/2023	Direc...	Moreno, Joe		-2,965.48	3,295,442.18
Paycheck	06/30/2023	Direc...	Powers, Frantiska A		-1,674.36	3,293,767.82
Paycheck	06/30/2023	Direc...	Saldana, Michael A		-1,633.50	3,292,134.32
Paycheck	06/30/2023	Direc...	Shirk, Austin		-1,661.37	3,290,472.95
Paycheck	06/30/2023	Direc...	Sims, Clarissa R		-1,794.58	3,288,678.37
Paycheck	06/30/2023	Direc...	Wallace, Russell L		-2,148.81	3,286,529.56



**CANYON REGIONAL WATER AUTHORITY**  
**Monthly General Account Check Register**  
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Type	Date	Num	Name	Memo	Amount	Balance	
Paycheck	06/30/2023	Direc...	Whitelatch, Jr., Richard L		-1,446.08	3,285,083.48	
Paycheck	06/30/2023	Direc...	Kaufman, John M		-4,723.70	3,280,359.78	
Paycheck	06/30/2023	Direc...	McMullen, David W.		-3,527.75	3,276,832.03	
Paycheck	06/30/2023	Direc...	Ramos, Humberto		-3,130.75	3,273,701.28	
Paycheck	06/30/2023	Direc...	Telfer, Adam C		-3,280.76	3,270,420.52	
Paycheck	06/30/2023	Direc...	Wilkinson, Joan A.		-3,178.79	3,267,241.73	
Paycheck	06/30/2023	Direc...	McKnight III, John R.		-1,624.38	3,265,617.35	
Check	06/30/2023	36824	Charles C. Bailey	Monthly Government...	-2,000.00	3,263,617.35	
Liability Check	06/30/2023	ACH	John Hancock	401(k) Retirement Plan	-1,246.99	3,262,370.36	
Liability Check	06/30/2023	EFTPS	US Treasury	74-2586063	-15,361.44	3,247,008.92	
Liability Check	06/30/2023	36825	California State Disbursem...	200000001098628	-449.07	3,246,559.85	
Liability Check	06/30/2023	36826	Office of the Attorney Gene...	AG# 0012809999	-489.69	3,246,070.16	
Bill Pmt -Che...	06/30/2023	36827	5S Service Company LLC	Motors & Repairs	-38,960.60	3,207,109.56	
Bill Pmt -Che...	06/30/2023	36828	Alsay Incorporated	HSP #4 Repair	-13,400.00	3,193,709.56	
Bill Pmt -Che...	06/30/2023	36829	Attorney R. L. Wilson	Reimb S. Kanetzky E...	-9,060.85	3,184,648.71	
Bill Pmt -Che...	06/30/2023	36830	Austin Armature Works, LP	HC Repairs	-2,002.25	3,182,646.46	
Bill Pmt -Che...	06/30/2023	36831	B&B Family Partnership	Baugh Water Lease ...	-2,000.00	3,180,646.46	
Bill Pmt -Che...	06/30/2023	36832	Bleck Electric Company	Motors & Pump	-11,685.00	3,168,961.46	
Bill Pmt -Che...	06/30/2023	36833	Brenntag Southwest, Inc.	Chemicals	-2,549.60	3,166,411.86	
Bill Pmt -Che...	06/30/2023	36834	Fluid Meter Service, Corp.	Field Test Meters	-2,250.00	3,164,161.86	
Bill Pmt -Che...	06/30/2023	36835	Gold Star Exterminators	Pest Control	-260.00	3,163,901.86	
Bill Pmt -Che...	06/30/2023	36836	Grainger	Parts	-1,788.16	3,162,113.70	
Bill Pmt -Che...	06/30/2023	36837	Guadalupe County Ground...	GW Transport/Pumpi...	-15,288.55	3,146,825.15	
Bill Pmt -Che...	06/30/2023	36838	Hawkins	Chemicals	-20,113.00	3,126,712.15	
Bill Pmt -Che...	06/30/2023	36839	Humberto Ramos.	June Mileage	-514.18	3,126,197.97	
Bill Pmt -Che...	06/30/2023	36840	Lhoist North America of Te...	Lime	-13,929.21	3,112,268.76	
Bill Pmt -Che...	06/30/2023	36841	R.W Harden & Associates, ...	Wells Ranch Develop...	-1,500.50	3,110,768.26	
Bill Pmt -Che...	06/30/2023	36842	South Texas Wastewater	HC Septic Tank Rep...	-894.00	3,109,874.26	
Bill Pmt -Che...	06/30/2023	36843	Standard Insurance Compa...	Employee Life & LTD...	-814.58	3,109,059.68	
Bill Pmt -Che...	06/30/2023	36844	Wastewater Transport Serv...	Sludge Removal	-8,777.89	3,100,281.79	
Deposit	06/30/2023			Interest	813.43	3,101,095.22	
Total 1006 · First United Checking #5207						765,471.71	3,101,095.22
Total 1001 · First United Bank						765,471.71	3,101,095.22
<b>TOTAL</b>						<b>765,471.71</b>	<b>3,101,095.22</b>

**CANYON REGIONAL WATER AUTHORITY**

**Legal Fees by Payee**

**October 2022 through June 2023**

Type	Date	Num	Name	Memo	Amount	Balance
<b>Attorney R. L. Wilson</b>						
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
<b>Charles C. Bailey</b>						
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
Total Charles C. Bailey					18,000.00	18,000.00
<b>Employers Council</b>						
Bill	04/19/2023	461185	Employers Council	Legal Services-Employee Policy Manual	810.00	810.00
Total Employers Council					810.00	810.00
<b>Louis T. Rosenberg</b>						
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
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



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

Type	Date	Num	Name	Memo	Amount	Balance
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
<b>TOTAL</b>					<b>287,664.07</b>	<b>287,664.07</b>



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

Type	Date	Num	Name	Memo	Amount
<b>Other Charges</b>					
<b>Legal &amp; professional fees</b>					
<b>Contracts</b>					
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
Total Contracts					65,921.06
<b>Personnel</b>					
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
<b>Committee Matters</b>					
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
Bill	06/30/2023	5561	Louis T. Rosenberg	Policy Committee	5,097.95
Total Committee Matters					67,485.81

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

Type	Date	Num	Name	Memo	Amount
<b>Wells Ranch</b>					
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
<b>General</b>					
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
Total General					80,313.46
<b>Water Rights</b>					
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
<b>Legislation</b>					
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
Bill	06/30/2023	5560	Louis T. Rosenberg	Legislation	156.00
Total Legislation					26,793.00
Total Legal & professional fees					287,664.07
Total Other Charges					287,664.07
<b>TOTAL</b>					<b>287,664.07</b>



**Wells Ranch Project - Phase II**  
**Bond Series 2015**  
**Budget vs. Actual**  
**June 30, 2023**

	TOTAL BUDGET	TOTAL 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%
<b>Preliminary Engineering Report</b>	<b>25,000.00</b>	<b>25,000.00</b>	<b>100.00%</b>
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%
<b>Total Leissner Booster Stn Expansion</b>	<b>3,123,007.46</b>	<b>3,121,201.96</b>	<b>99.94%</b>
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	50,835.83	50,835.83	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%
<b>Total Deadman Well Site</b>	<b>276,265.00</b>	<b>236,349.00</b>	<b>85.55%</b>
Deer Stand Well Site			
Generator Cost	71,265.00	54,522.00	76.51%
Generator Installation	205,000.00	181,826.60	88.70%
<b>Total Deer Stand Well Site</b>	<b>276,265.00</b>	<b>236,348.60</b>	<b>85.55%</b>
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%
<b>Total Wells Ranch WTP Site</b>	<b>1,388,925.00</b>	<b>1,161,548.45</b>	<b>83.63%</b>
Leissner BPS Site			
Generator Cost	212,200.00	162,343.80	76.51%
Generator Installation	342,000.00	302,473.26	88.44%
<b>Total Leissner BPS Site</b>	<b>554,200.00</b>	<b>464,817.06</b>	<b>83.87%</b>
Wagner Booster Station			
Generator Cost	212,200.00	162,343.80	76.51%
Generator Installation	263,000.00	232,034.40	88.23%
<b>Total Wagner Booster Station</b>	<b>475,200.00</b>	<b>394,378.20</b>	<b>82.99%</b>
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%
<b>Total Generator Installation Project</b>	<b>3,430,584.99</b>	<b>2,883,215.95</b>	<b>84.04%</b>
<b>Total Phase II - 2015</b>	<b>40,465,090.26</b>	<b>39,915,914.22</b>	<b>98.64%</b>
Unallocated Contingency	-549,930.26		
<b>Total Expenditures</b>		<b>39,915,914.22</b>	
Interest Income	431,899.13	435,973.53	
Cash from General Funds	53,741.57	53,741.57	
Cash from General Funds	64,289.56	0.00	
Ending Cash	0.00	488,960.88	



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08/03/23  
Accrual Basis

**Wells Ranch Phase II - 2015**  
**Account QuickReport**  
**As of June 30, 2023**

Type	Date	Num	Name	Memo	Amount	Balance
BOKF, NA, Austin - Escrow						123,482.64
Deposit	06/01/2023			Interest	474.37	123,957.01
Total BOKF, NA, Austin - Escrow					474.37	123,957.01
Logic-Construction Acct						363,434.02
Deposit	06/30/2023			Interest	1,569.85	365,003.87
Total Logic-Construction Acct					1,569.85	365,003.87
<b>TOTAL</b>					<b>2,044.22</b>	<b>488,960.88</b>

## Hays Caldwell WTP Improvements Budget vs. Actual June 30, 2023

	TOTAL BUDGET	TOTAL 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%
<b>Beginning Cash Available for Project</b>	<b>22,303,171.00</b>	<b>22,303,171.00</b>	<b>100.00%</b>
<b>Land Purchase - 2.009 Acres</b>	<b>555,628.44</b>	<b>555,628.44</b>	<b>100.00%</b>
<b>TWDB D-Fund Application Services</b>	<b>35,700.00</b>	<b>35,700.00</b>	<b>100.00%</b>
<b>HMGP Application</b>	<b>12,000.00</b>	<b>12,000.00</b>	<b>100.00%</b>
<b>Basic Engineering Services:</b>			
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%
<b>Total Basic Engineering Services</b>	<b>1,664,800.00</b>	<b>1,132,100.00</b>	<b>68.00%</b>
<b>Additional Engineering Services:</b>			
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%
<b>Total Additional Engineering Services</b>	<b>971,500.00</b>	<b>577,324.53</b>	<b>59.43%</b>
<b>HCWTP Ozone Deman &amp; Decay Testing</b>	<b>9,992.00</b>	<b>9,992.00</b>	<b>100.00%</b>
<b>City of San Marcos-Permits</b>	<b>4,229.74</b>	<b>4,229.74</b>	<b>100.00%</b>
<b>SCADA</b>			
Design Fees	20,000.00	3,963.75	19.82%
Construction Costs	150,000.00		0.00%
<b>Total SCADA Costs</b>	<b>170,000.00</b>	<b>3,963.75</b>	<b>2.33%</b>
<b>Bluebonnet Electric Coop - Service Entrances</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00%</b>

**Hays Caldwell WTP Improvements  
Budget vs. Actual  
June 30, 2023**

	TOTAL BUDGET	TOTAL DISBURSEMENTS	%
<b>Probable Construction Costs</b>			
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%
<b>Total Probable Construction Costs</b>	<b>21,349,000.00</b>	<b>0.00</b>	<b>0.00%</b>
<b>Total Hays Caldwell WTP Improvements</b>	<b>24,772,850.18</b>	<b>2,330,938.46</b>	<b>9.41%</b>
<b>Unallocated Contingency</b>	<b>-2,469,679.18</b>		<b>0.00%</b>
<b>Total Expenditures</b>		<b>2,330,938.46</b>	
Interest Income		977,467.14	
Ending Cash		<b>20,949,699.68</b>	



7:51 AM

08/03/23

Accrual Basis

### Hays Caldwell WTP Improvements

## Banking Activity

As of June 30, 2023

Type	Date	Num	Name	Memo	Amount	Balance
Logic, Construction Acct						16,784,921.43
Deposit	06/30/2023			Interest	72,502.56	16,857,423.99
Total Logic, Construction Acct					72,502.56	16,857,423.99
BOKF, NA						4,077,400.62
Deposit	06/01/2023			Interest	14,875.07	4,092,275.69
Total BOKF, NA					14,875.07	4,092,275.69
<b>TOTAL</b>					<b>87,377.63</b>	<b>20,949,699.68</b>

## MEMORANDUM

To: CRWA Board of Trustees

From: John M. Kaufman, General Manager

Date: August 14, 2023

Subject: CRWA Staff Report

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### Water Treatment, Storage, and Transmission Operations

- A. Wells Ranch WTP:
  - a. Raw water production – currently about 11.0 MGD.
  - b. TCEQ inspection – CRWA is responding to TCEQ’s compliance letter. Corrections to minor deficiencies are due by October 1, 2023.
  - c. Wells:
    - ♦ Well No. 1 Rehabilitation – The vertical turbine pump was installed August 11, 2023. Bacteriological testing and start-up will occur in the week of August 14, 2023.
- B. Lake Dunlap WTP:
  - a. Raw water production – currently about 13.3 MGD.
  - b. CRWA issued an RFQ for Engineering services on the Lake Dunlap Membrane Improvements Project July 12, 2023. Engineering SOQs were due by August 11, 2023.
- C. Hays Caldwell WTP:
  - a. Raw water production – currently about 2.9 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 July 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. A graph of the monitoring results is attached.



MIB is commonly produced by various blue-green algae (cyanobacteria), filamentous bacteria, and some other single-cell organisms. These organisms give a musty or earthy odor that can be detected if an algal bloom is present. Subsequent death of the microorganisms will release MIB that is trapped in the cells.

MIB and geosmin do not pose a public health risk, but their presence can cause concern about the quality of drinking water. Some of the entities have received customer complaints about the taste and odor of the water. SAWS stopped receiving water from CRWA on June 23, 2023, because of the taste and odor issue.

MIB and geosmin compounds are difficult to remove during water treatment. The most effective plant-site treatment method employs the use of powdered activated carbon (PAC) in the pretreatment system. The Lake Dunlap pretreatment system does not include the use of PAC to control taste and odor.

### **PFAS Testing**

Recent 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). Both compounds are found in industrial surfactants.

In August TCEQ plans to test water from the Lake Dunlap WTP for PFAS chemicals.

### **Grant Application**

In June, we reported that CRWA filed an Emerging Contaminants Project Information Form (PIF) through the Texas Water Development Board (TWDB) for a grant to conduct bench scale and pilot testing for PFAS removal at the Lake Dunlap WTP.

On Monday July 3, 2023, TWDB released draft PFAS project rankings for public comment ending July 17.

- CRWA’s project ranked 11 of just 15 applicants.
- The ranking system prioritized small water systems and rural areas.

We will continue to monitor the program.

### **4 FY Budget**

The 2024 FY draft budget is being prepared.

### **GBRA**

- CRWA staff awaiting first meeting of *Second Party Take Stakeholder* regarding Guadalupe Habitat Conservation Plan (HCP).

### **Region L**

The following report was provided by Brandon Rohan, General Manager of East Central SUD, who attended the Regional L meeting August 3, 2023.

*I attended the Region L meeting on August 3, 2023, for ECSUD and took notes on the following high-level observations:*

*The planning group received nominations for various vacancies resulting from term expirations and resignations. Most importantly, Humberto Ramos was selected to continue representing water districts on the planning group.*

*Mr. Ramos chairs a subcommittee that worked on population and water demand projections. The subcommittee received ~47 requests for revisions to individual water user groups population and water demand projections. Multiple CRWA member entities requested revisions. The TWDB provided two migration scenarios for the planning groups to consider. Instead of applying one scenario to the entire*

*region, the subcommittee carefully applied one of the two scenarios on a per-county basis. Typically, a request for an increase in a water user group's population requires a decrease in some other water use group's population for a net zero change. This year, the planning group voted to send the requested revisions for increases to the TWDB without a proportionate decrease.*

*San Antonio Water System provided an update on the 88<sup>th</sup> Legislative Session.*

*The planning group is working on identifying infeasible water management strategies, and if any are identified, a revision to the previous plan will be necessary.*

*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 conducted at SAWS on November 2<sup>nd</sup> at 9:30 a.m.*

### **GBC**

- July meeting was cancelled.

### **GMA 13**

- Next meeting is September 15<sup>th</sup>.

### **Guadalupe County Groundwater Conservation District**

- Staff attended Board meeting on August 10<sup>th</sup>.

### **Gonzales County Underground Water Conservation District. (GCUWCD)**

- CRWA's request to amend its permit by 920 acre-feet for Well -14 was discussed during a workshop at the August GCUWCD Board meeting.
- 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 10<sup>th</sup> 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.





Lake Dunlap / Wells Ranch  
Water Usage Summary

Draft

YEAR 2023 (January thru July)		
Lake Dunlap & Wells Ranch Raw Water Inventory		Lake Dunlap & Wells Ranch Contract Amounts
<b>LD Surface Water</b>	<b>Acre-Feet</b>	<b>LD Supply Contracts</b>
GBRA Leased Raw Water	10,575.00	SAWS
CRWA Water Rights/Raw Water	564.50	City of Cibolo
Crystal Clear/GBRA Leased Water <sup>1</sup>	500.00	East Central SUD
<b>Annual Total</b>	<b>11,639.50</b>	Green Valley SUD
<b>WR Ground Water</b>	<b>Acre-Feet</b>	City of Marion
Guadalupe Carrizo Leased	2,603.42	Crystal Clear SUD
Guadalupe Wilcox Leased	3,026.00	Springs Hill WSC
Gonzales Carrizo Leased	7,400.00	<b>Annual Total</b>
<b>Annual Total</b>	<b>13,029.42</b>	<b>10,980.00</b>
LD & WR Combined Annual Raw Water Inventory		Wells Ranch Phase I & II Combined Contract Amounts
	<b>Acre-Feet</b>	<b>Acre-Feet</b>
Lake Dunlap WTP	11,639.50	SAWS <sup>2</sup>
Wells Ranch WTP	13,029.42	City of Cibolo <sup>3</sup>
<b>2023 Annual Total</b>	<b>24,668.92</b>	East Central SUD
<b>Comments:</b>  <sup>1</sup> Crystal Clear Leases 500.00 acre-feet from GBRA. CRWA reports these diversions to the Water Master.  <sup>2</sup> Springs Hill leases 500.00 acre-feet of Dunlap water from SAWS. This contract is due to expire December 31, 2023.  <sup>3</sup> Cibolo leases 741.00 acre-feet of Wells Ranch water from Crystal Clear. This contract is due to expire December 31, 2023.		Green Valley SUD
		City of Marion
		Crystal Clear SUD <sup>3</sup>
		Springs Hill WSC <sup>2</sup>
		City of Converse
		<b>Annual Total</b>
		<b>13,029.00</b>
<b>LD &amp; WR Annual Contract Amount</b>		<b>24,009.00</b>

Lake Dunlap / Wells Ranch  
Water Usage Summary



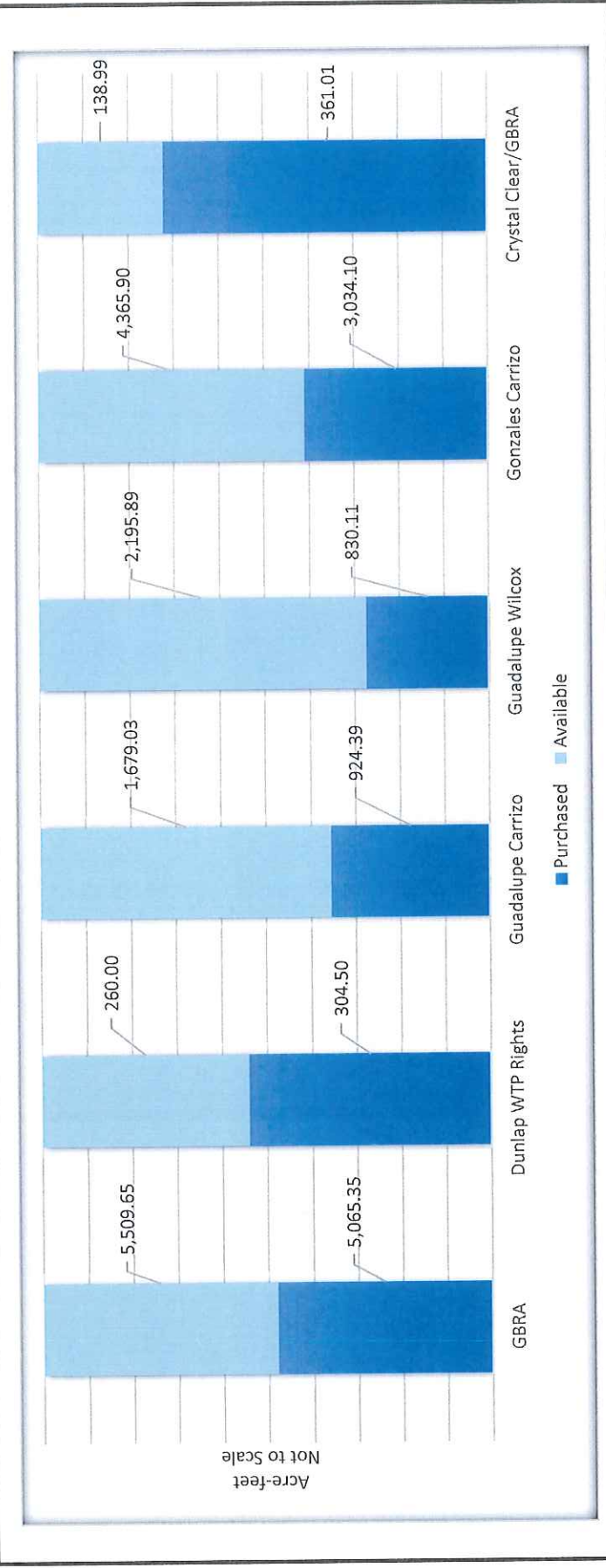
CRWA Entites - LD & WR Total Contract Amounts 2023	
Entity	Acre-Feet
SAWS	6,300.00
City of Cibolo	3,951.93
East Central SUD	2,400.00
Green Valley SUD	7,455.68
City of Marion	300.00
Crystal Clear SUD	551.39
Springs Hill WSD	2,550.00
City of Converse	500.00
<b>Total</b>	<b>24,009.00</b>

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.

2023 (January thru July) Lake Dunlap/Wells Ranch Use

% Use 43%  
% Available 57%

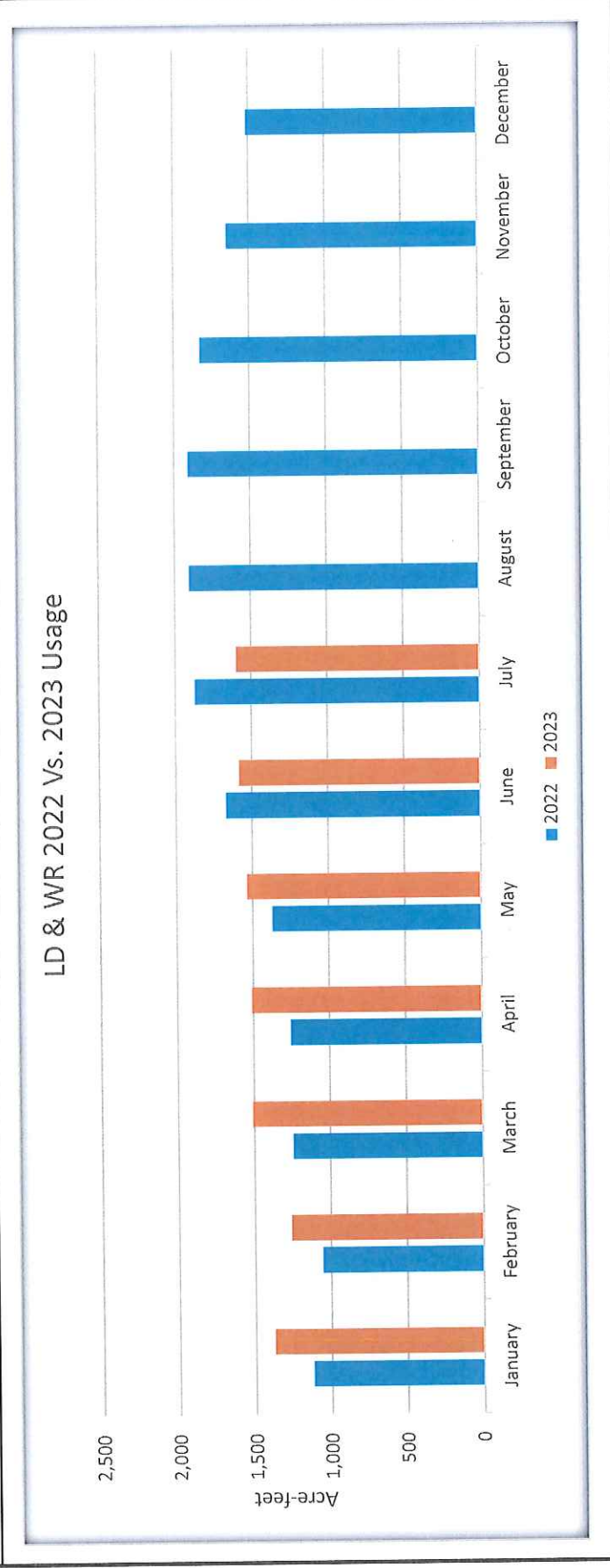


Lake Dunlap / Wells Ranch  
Water Usage Summary



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	3,057.77	3,242.23	49%	
City of Cibolo	3,951.93	1,266.01	2,685.92	32%	
East Central SUD	2,400.00	1,141.93	1,258.07	48%	
Green Valley SUD	7,455.68	2,803.56	4,652.12	38%	
City of Marion	300.00	7.39	292.61	2%	
Crystal Clear SUD	551.39	369.89	181.50	67%	
Springs Hill WSC	2,550.00	1,137.73	1,412.27	45%	
City of Converse	500.00	203.30	296.70	41%	
<b>Total</b>	<b>24,009.00</b>	<b>9,987.59</b>	<b>14,021.41</b>	<b>42%</b>	<b>58%</b>

LD & WR Contracts Percentage Use





Lake Dunlap / Wells Ranch  
Water Usage Summary

Draft

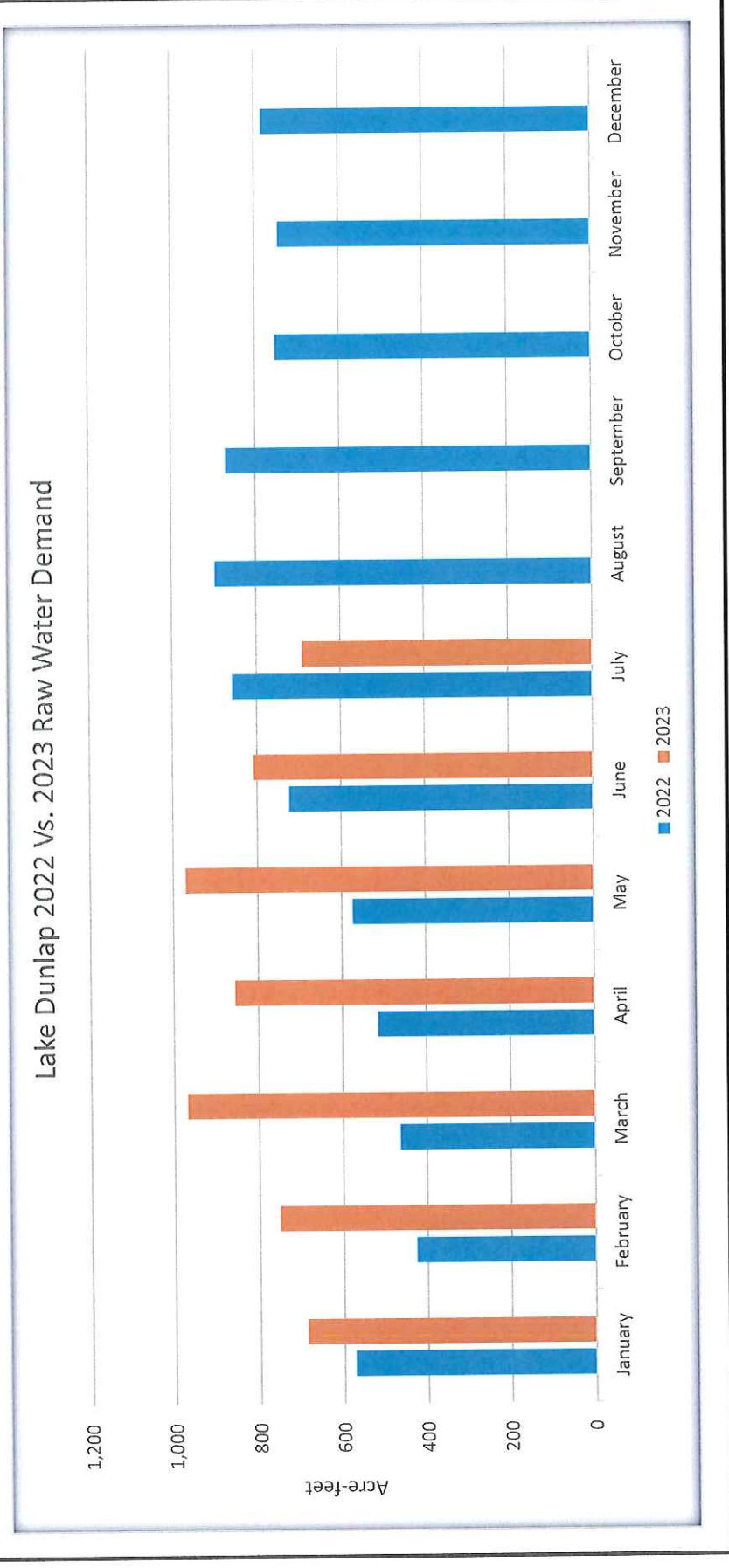


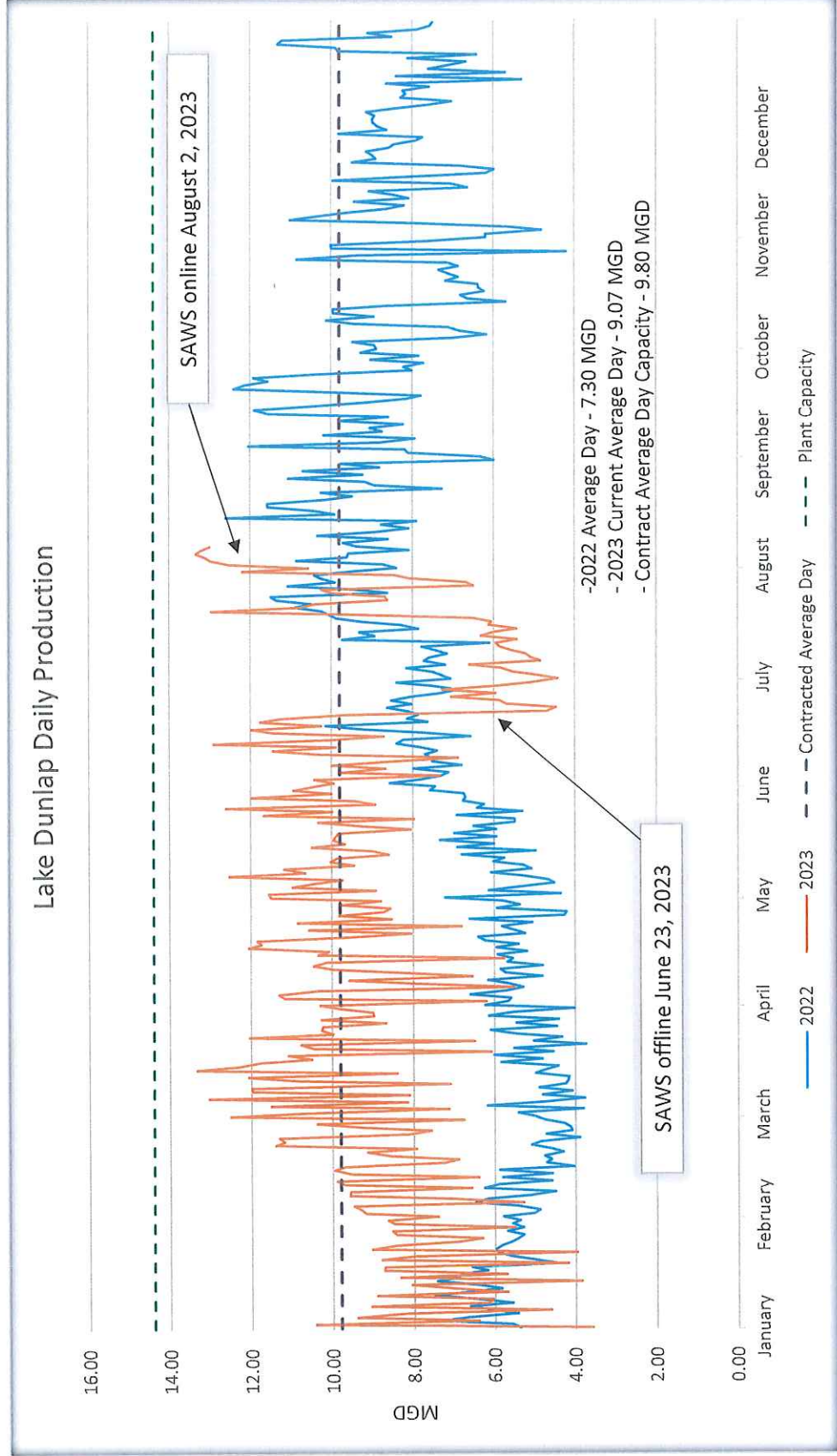
2023 (January thru July) Lake Dunlap WTP Raw Water Usage By Right						
	Annual Allocation		YTD Use		Available	
	Acre-feet		Acre-feet		Acre-feet	
GBRA	10,575.00		5,065.35		5,509.65	
River Mill #18-3829	400.00		161.48		238.52	
Ray Dittmar #18-3832A	44.00		44.00		0.00	
Gary Dittmar #18-3833B	30.50		30.50		0.00	
William Daniel #18-3834	71.48		50.00		21.48	
William Daniel #18-3834A	18.52		18.52		0.00	
Crystal Clear GBRA Lease	500.00		361.01		138.99	
<b>Total</b>	<b>11,639.50</b>		<b>5,730.86</b>		<b>5,908.64</b>	
2023 (January thru July) Wells Ranch WTP Raw Water Use By Permit						
	Guadalupe County Wells		Wilcox		Gonzales County Wells	
	Acre-feet		Acre-feet		Acre-feet	
Carrizo						
#2 Deer Stand	378.34		#3 Deer Stand	339.42	#1 Tommy's	6.81
#4 Pig Trap	326.47		#6 Dead Man Tank	490.69	#5 Littlefield	444.53
#7 Dead Man Tank	219.57				#8 Chickenhouse	392.29
<b>Total</b>	<b>924.39</b>		<b>Total</b>	<b>830.11</b>	#9 Camphouse	376.01
Ground Water Permit Use						
	Use Acre-feet		Contract	Available		
Guadalupe Carrizo	924.39		2,603.42	1,679.03	#11 Coastal Field	284.15
Guadalupe Wilcox	830.11		3,026.00	2,195.89	#12 Bull Trap	221.62
<b>Total Guadalupe</b>	<b>1,754.50</b>		<b>5,629.42</b>	<b>3,874.91</b>	#13 Bond West	225.31
<b>Total Gonzales Carrizo</b>	<b>3,034.10</b>		<b>7,400.00</b>	<b>4,365.90</b>	#14 Christian West	448.50
					#15 Bond East	381.04
					#16 Christian East	253.85
					<b>Total</b>	<b>3,034.10</b>
<b>Total Ground Water</b>	<b>4,788.60</b>		<b>13,029.42</b>	<b>8,240.82</b>		

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
Jan-22	572.33	Jul-22	857.51	Jan-23	686.98
Feb-22	424.65	Aug-22	896.95	Feb-23	751.16
Mar-22	462.09	Sep-22	869.85	Mar-23	967.84
Apr-22	514.80	Oct-22	752.27	Apr-23	855.36
May-22	573.38	Nov-22	745.02	May-23	969.72
Jun-22	724.71	Dec-22	783.07	Jun-23	807.93
Total Raw Water Demand		8,176.63		Total Raw Water Demand	
				5,730.84	



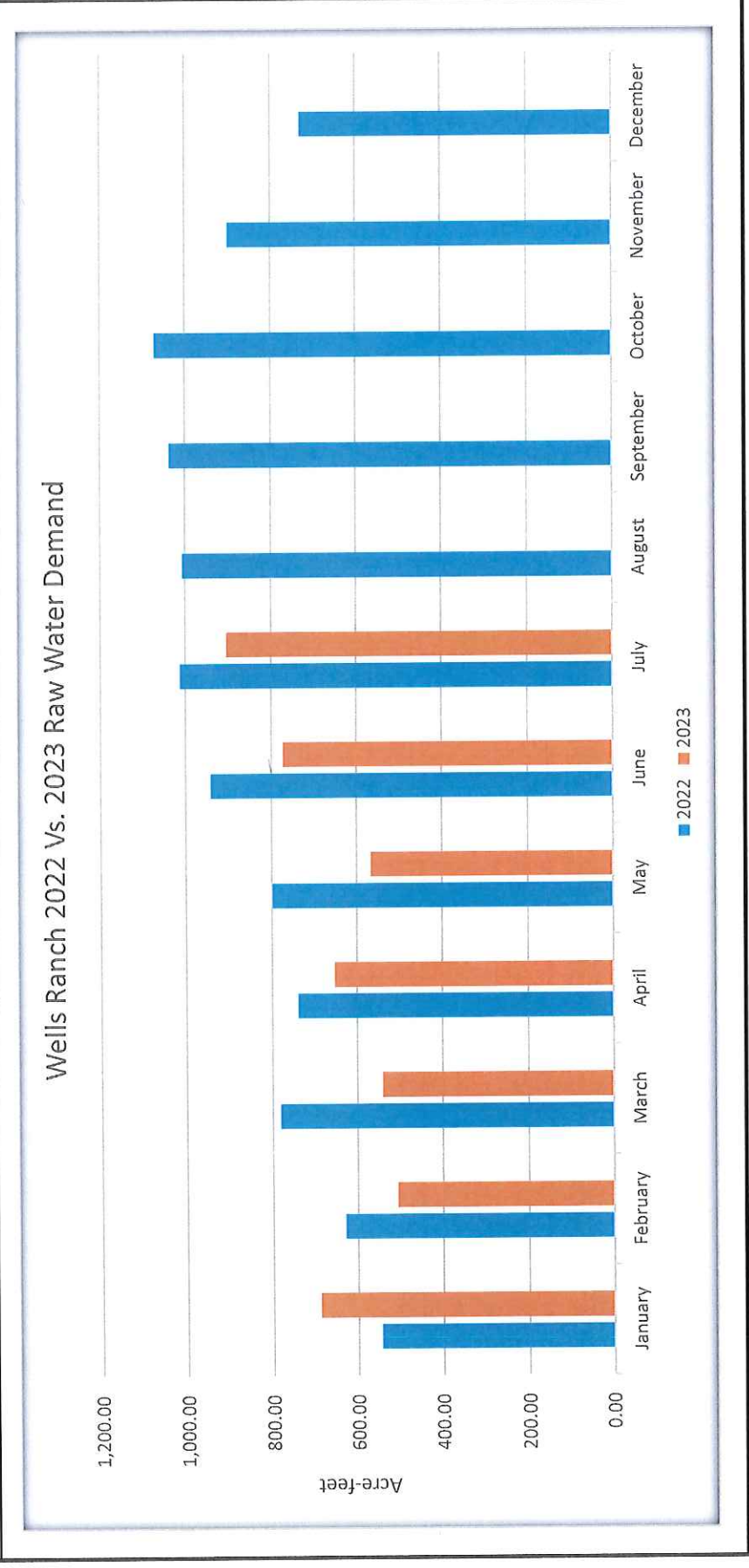




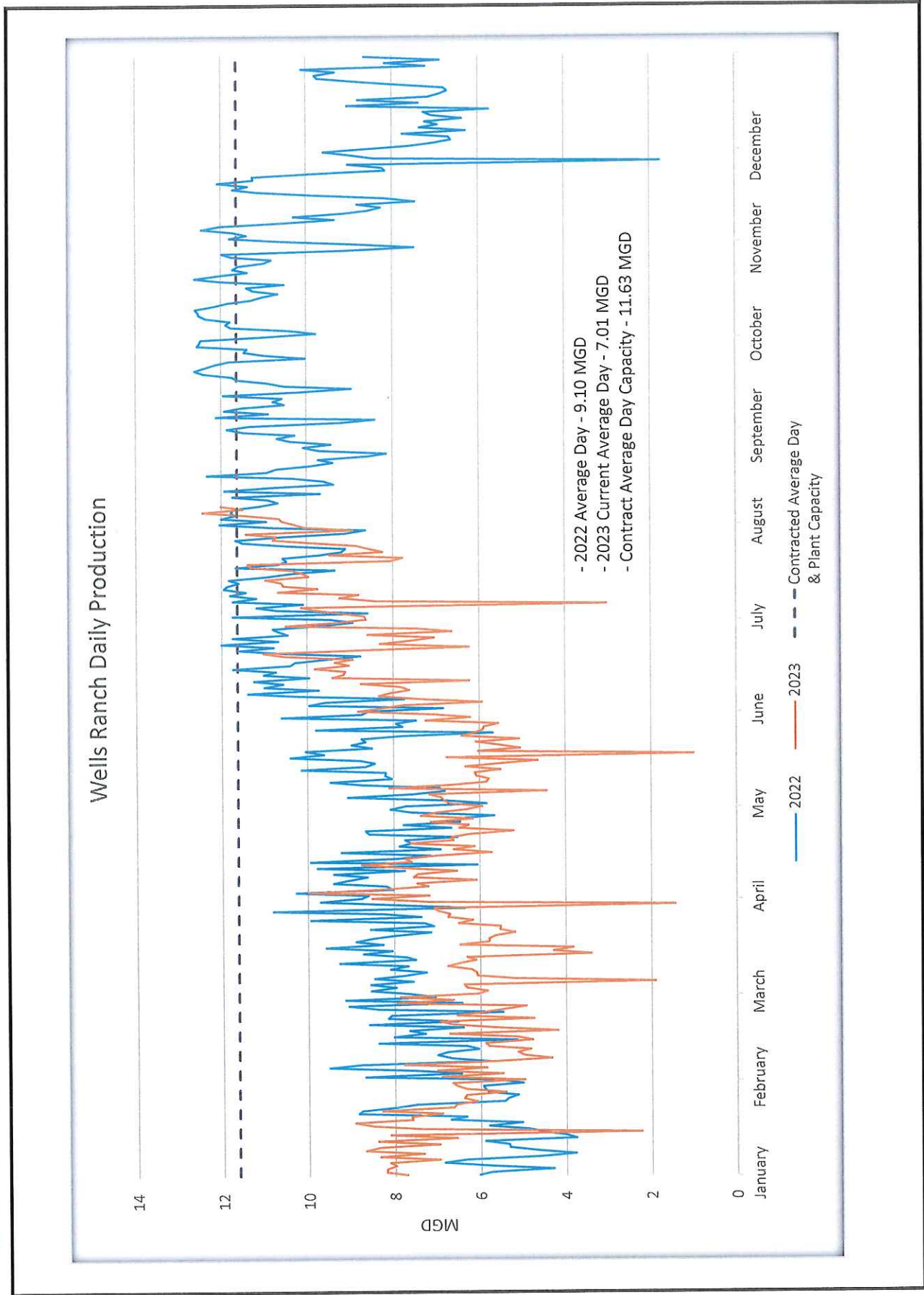
Lake Dunlap / Wells Ranch  
Water Usage Summary



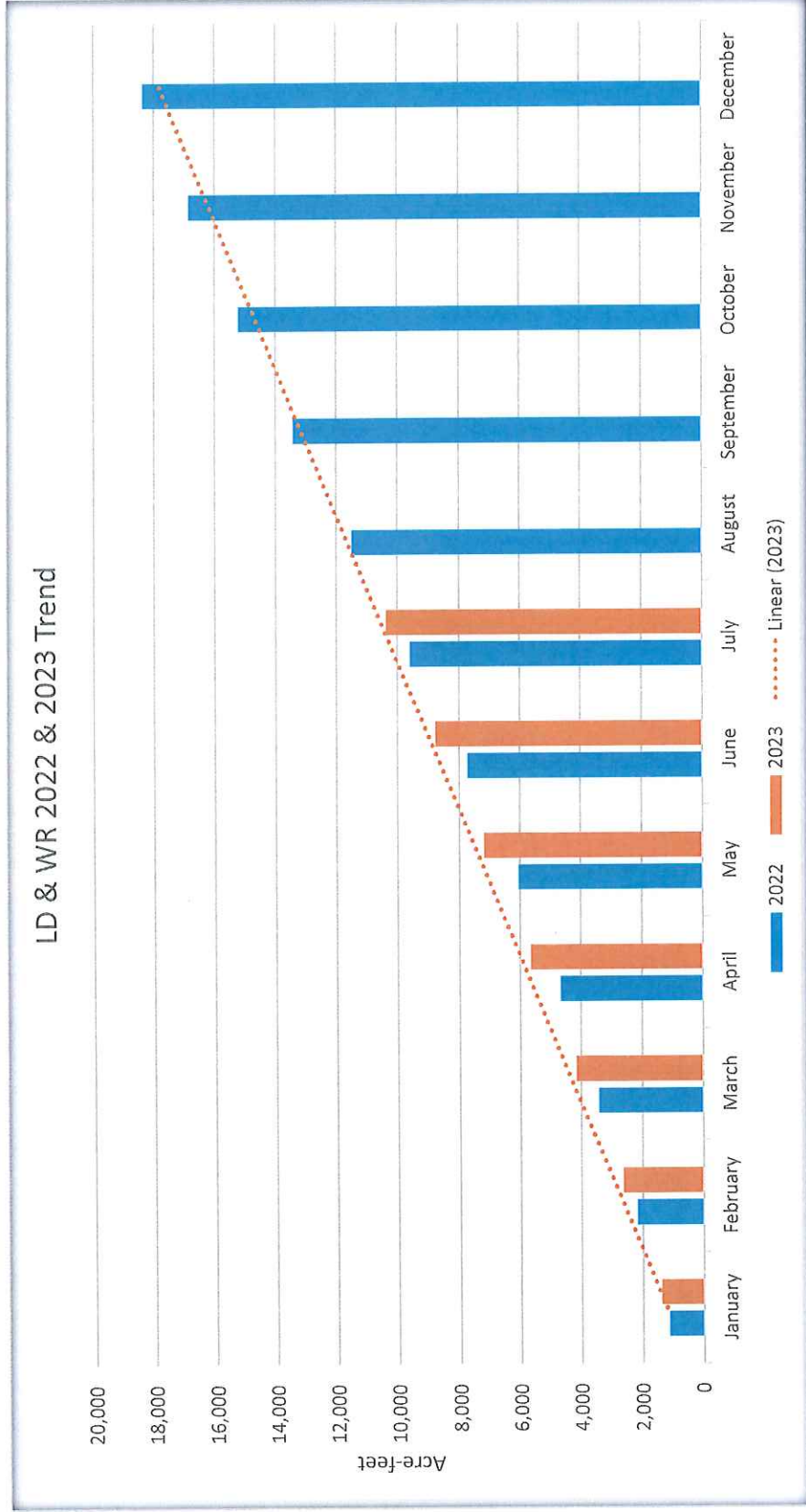
Wells Ranch Monthly Raw Water Demand Comparison					
2022			2023		
Month	Acre-feet	Month	Acre-feet	Month	Acre-feet
Jan-22	543.95	Jul-22	1,012.23	Jan-23	688.36
Feb-22	628.97	Aug-22	1,006.51	Feb-23	505.62
Mar-22	781.50	Sep-22	1,036.18	Mar-23	539.66
Apr-22	738.84	Oct-22	1,070.70	Apr-23	652.24
May-22	798.43	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	
				4,627.52	



Lake Dunlap / Wells Ranch  
Water Usage Summary

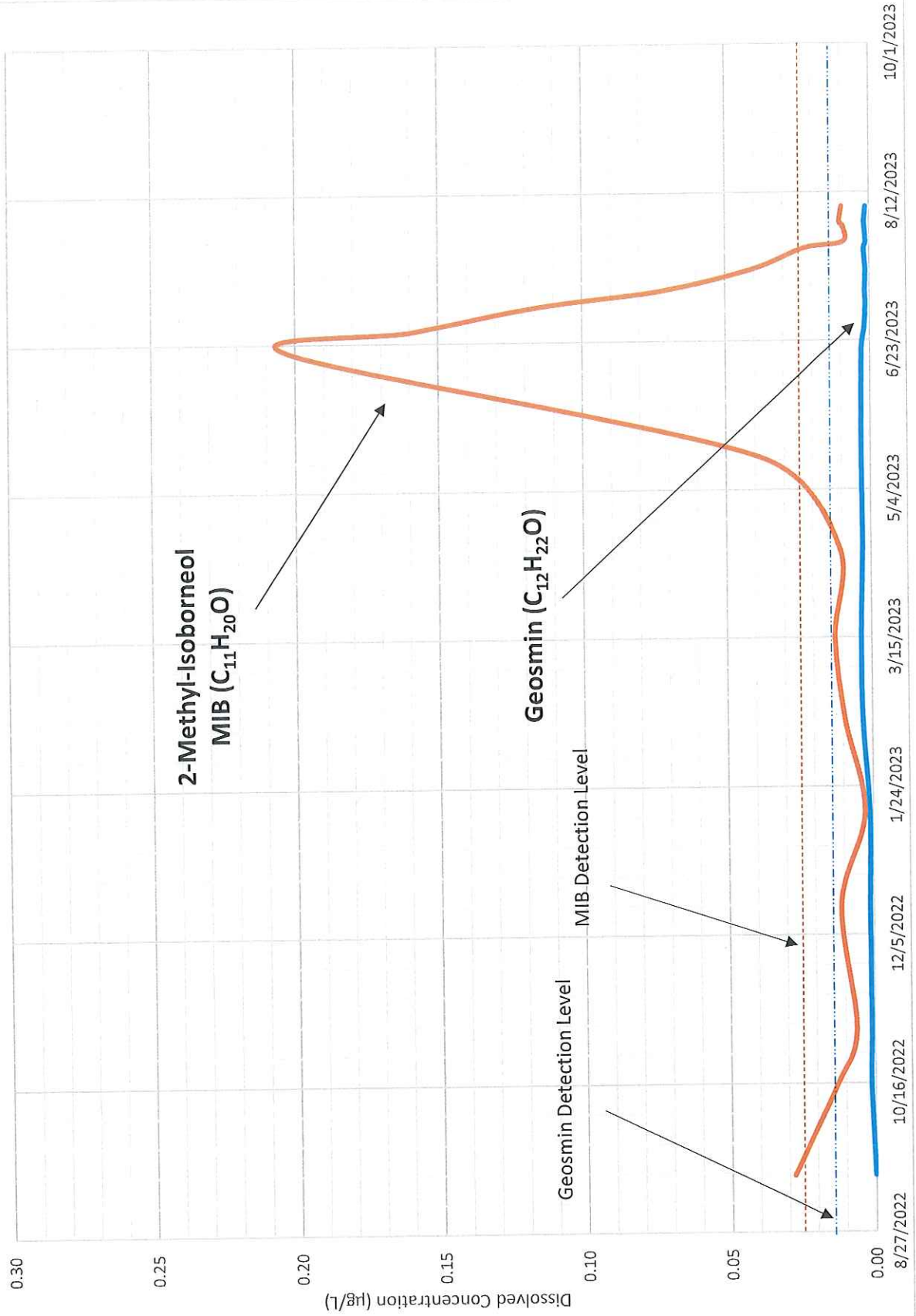


Lake Dunlap / Wells Ranch  
Water Usage Summary





# Lake Dunlap Taste & Odor Constituents

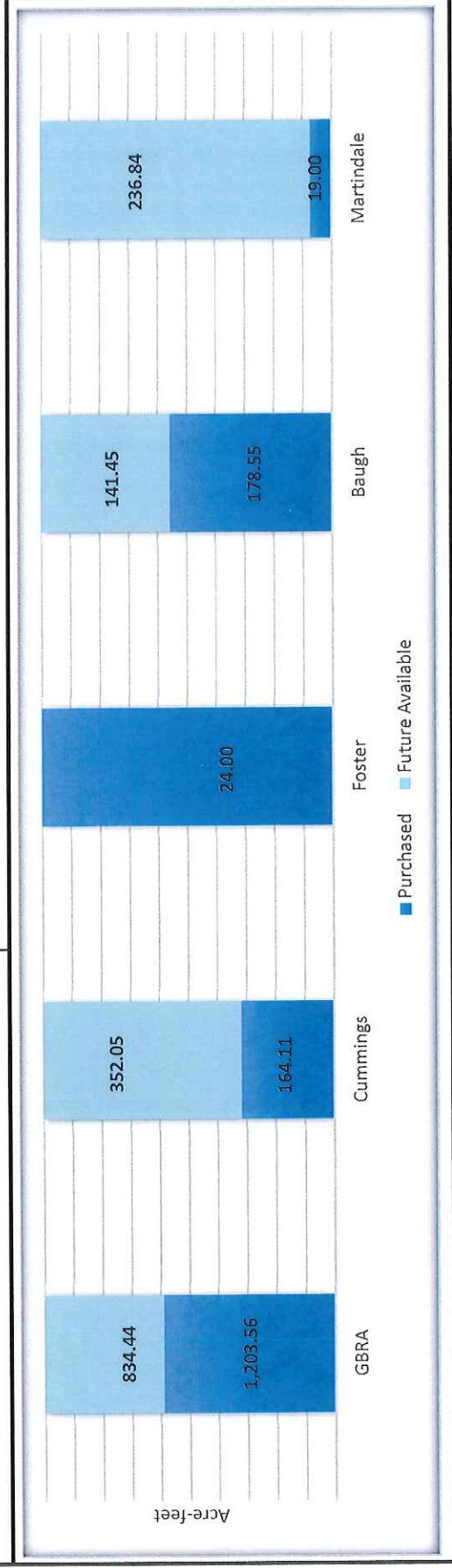


## Hays Caldwell WTP Water Use Summary



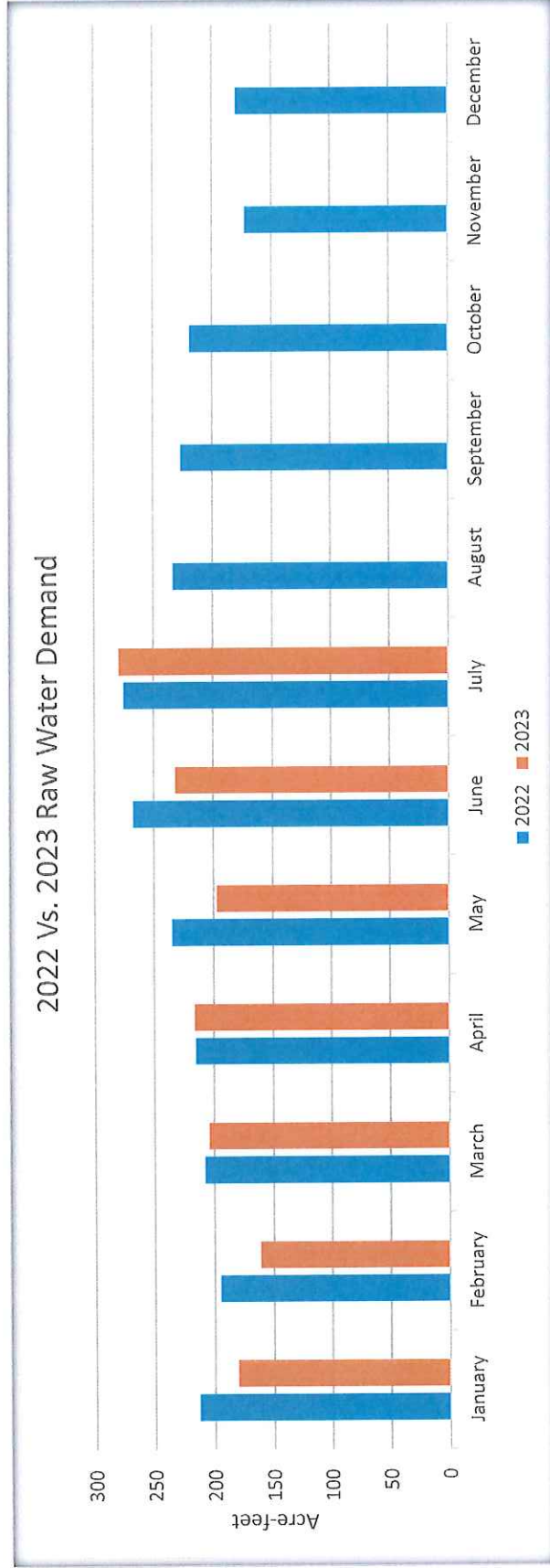
### YEAR 2023 (January thru July)

Hays Caldwell Raw Water Inventory	Acre-feet	Comments:
GBRA Take or Pay Leased Water	2,038.00	*Martindale/Cummings 18-3887D 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 AF/month on this right. Only Martindale may use this right.  ** Includes unused water provided under GBRA take-or-pay contract (January through July 119.91 AF).
Cummings/CRWA 18-3887	516.16	
Foster 18-3889A	24.00	
Baugh 18-3888A	320.00	
Cummings/Martindale 18-3887D	255.84	
<b>2023 Annual Total</b>	<b>3,154.00</b>	
<b>Raw Water Take</b>		
**GBRA Take or Pay Leased Water	1,203.56	
Cummings/CRWA 18-3887	164.11	
Foster 18-3889A	24.00	
Baugh 18-3888A	178.55	
Cummings/Martindale 18-3887D	19.00	
<b>**Total Raw Water Purchased</b>	<b>1,589.22</b>	
<b>Total Raw Water Available</b>	<b>1,564.78</b>	



\*Monthly Raw Water Demand Comparison

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
Feb-22	194.56	Aug-22	232.75	Feb-23	160.90	Aug-23	0.00
Mar-22	207.19	Sep-22	226.18	Mar-23	203.97	Sep-23	0.00
Apr-22	214.89	Oct-22	218.49	Apr-23	215.95	Oct-23	0.00
May-22	234.58	Nov-22	171.90	May-23	197.06	Nov-23	0.00
Jun-22	266.97	Dec-22	179.63	Jun-23	231.36	Dec-23	0.00
<b>Total Raw Water Demand</b>				<b>Total Raw Water Demand</b>			
<b>2,634.51</b>				<b>1,468.30</b>			



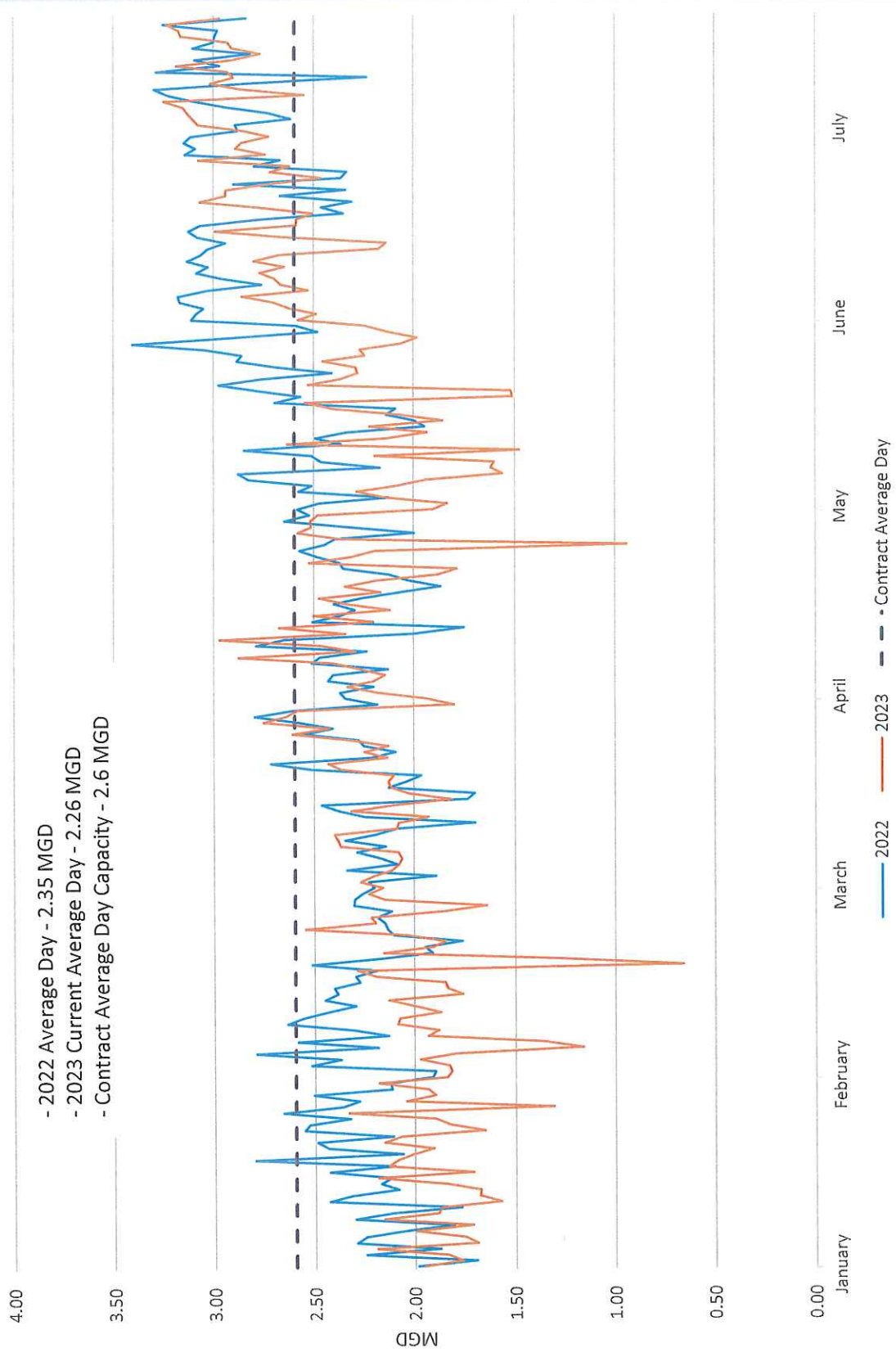
\*Monthly Raw Water Demand Comparison displays the actual raw water use.



### Hays Caldwell WTP Water Use Summary



2022 Vs. 2023 Daily Raw Water Demand



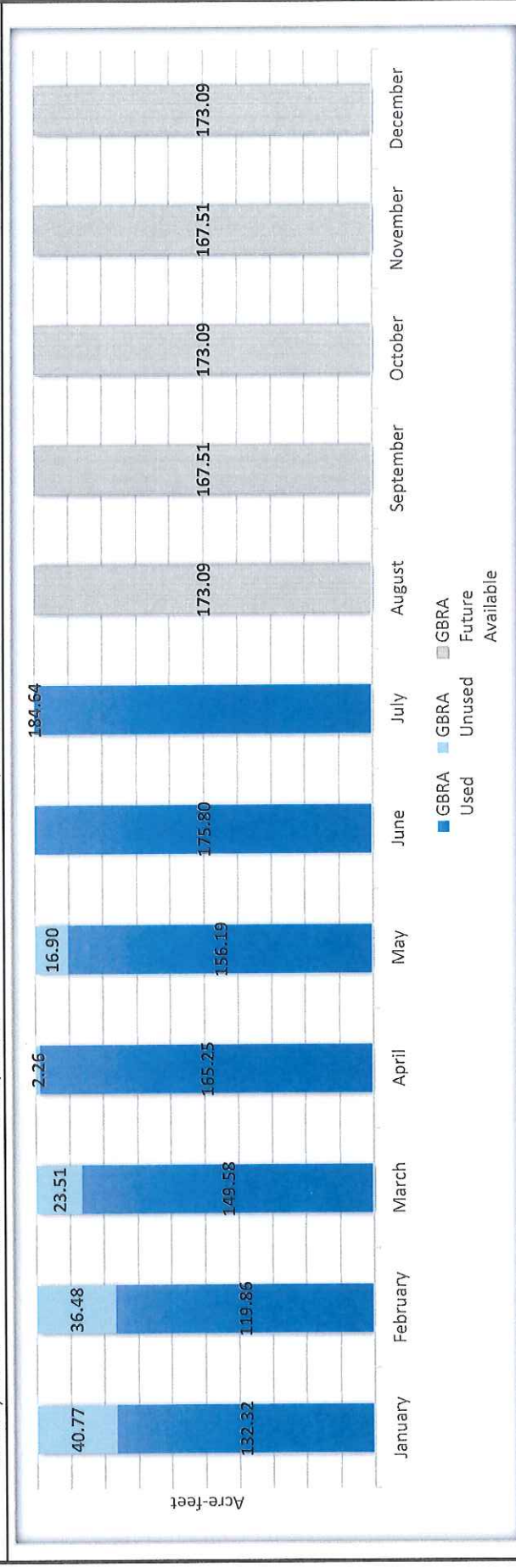


## Hays Caldwell WTP Water Use Summary

Draft

2023 GBRA Raw Water Use				
YTD GBRA % Used, Unused, Future Available		Used <sup>1</sup>	Unused <sup>2</sup>	Future Available <sup>3</sup>
		53%	6%	42%

GBRA Monthly Allocation <sup>4</sup>				
Month	Acre-feet	Month	Acre-feet	Month
January, 2023	173.09	July, 2023	173.09	October, 2023
February, 2023	156.34	August, 2023	173.09	November, 2023
March, 2023	173.09	September, 2023	167.51	December, 2023



1. "Used" means the volume of GBRA water that was treated and delivered to Hays Caldwell participating entities.
2. "Unused" means the volume of GBRA water that was not treated and not delivered to the Hays Caldwell participating entities because of reduced demand for the water. "Unused" GBRA water is not banked and is therefore not retrievable. Used GBRA + unused GBRA = Purchased GBRA Water.
3. "Future Available" means the volume of GBRA water that is available in the future as provided for in the GBRA water lease agreement.
4. GBRA water from the Guadalupe River is delivered daily to the Hays Caldwell WTP on a take-or-pay basis. The daily delivery volume is generally about 5.58 AF (or about 1.82 MGD). Monthly volume deliveries of GBRA water are determined by the number of days in the month.



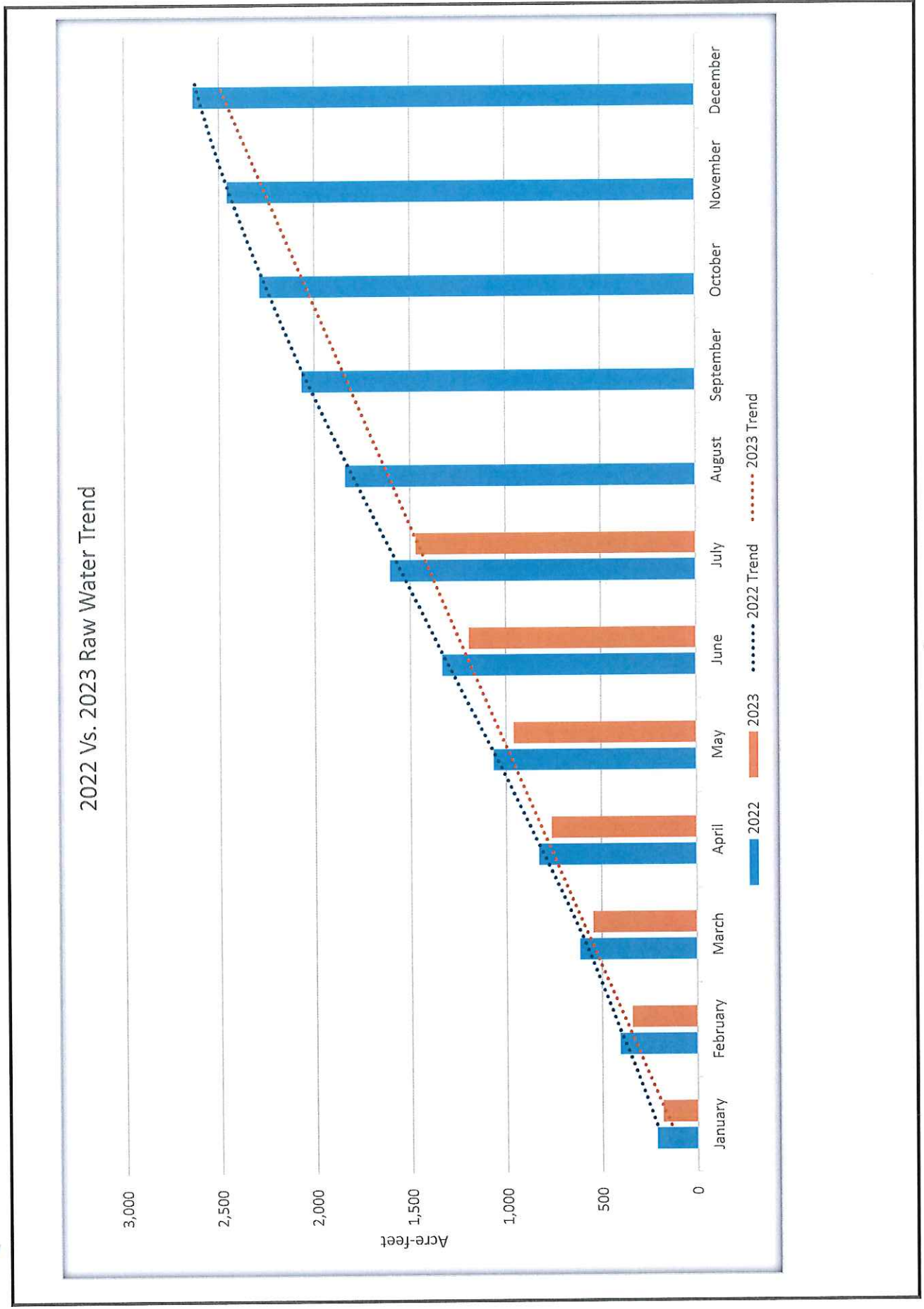
## Hays Caldwell WTP Water Use Summary

Draft

Hays Caldwell WTP Treated Water Use by Entity														
Month	County Line		Crystal Clear		Martindale		Maxwell		Total Treated		Unused GBRA		Total Volume Purchased	
	Acre-feet		Acre-feet		Acre-feet		Acre-feet		Acre-feet		Acre-feet		Acre-feet	
Jan-23	55.74		48.00		8.85		61.14		173.72		40.77		214.49	
Feb-23	57.69		42.03		8.72		52.57		161.01		36.48		197.48	
Mar-23	80.23		49.52		7.14		58.39		195.28		23.51		218.79	
Apr-23	81.28		56.96		7.23		62.84		208.31		2.26		210.56	
May-23	85.66		42.34		7.62		63.28		198.91		16.90		215.81	
Jun-23	93.42		51.41		10.63		65.74		221.21				221.21	
Jul-23	115.48		66.91		12.94		73.26		268.60				268.60	
Aug-23	0.00		0.00		0.00		0.00		0.00				0.00	
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	
<b>Total</b>	<b>569.50</b>		<b>357.18</b>		<b>63.12</b>		<b>437.22</b>		<b>1,427.03</b>		<b>119.91</b>		<b>1,546.94</b>	
<b>Purchased Water Vs. Contract</b>														
	<b>Annual Contract</b>		<b>*Purchased</b>		<b>Contract Remaining</b>									
	<b>Acre-feet</b>		<b>Acre-feet</b>		<b>Acre-feet</b>		<b>Acre-feet</b>		<b>Acre-feet</b>		<b>Acre-feet</b>		<b>Acre-feet</b>	
County Line	1,308.00		569.50		738.50									
Crystal Clear	500.00		357.18		142.82									
**Martindale	445.84		63.12		382.72									
Maxwell	900.00		437.22		462.78									
<p>*Purchased = Water Rights + GBRA Used + GBRA Unused  **Martindale Cummings right 18-3887D of 255.84 acre-feet is included in this table. Only Martindale may use this right.</p>														



### Hays Caldwell WTP Water Use Summary



## Alliance Regional Water Authority Update for CRWA Board Meeting



Graham Moore  
(August 2023)

### Board Meeting Activities in July:

- Below are items that the Board took up at the June Board meeting:
  - Discussed the FY 2023-24 budget.
  - Approved joining the Houston-Galveston Area Council Cooperative Purchasing Program and entered an agreement with NewGen Strategies and Solutions to develop in-system and out-of-system operations and maintenance rates to be charged by the Authority.

### 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; installed walls on top of CMU block in Filter Building; placed foundations for bladder tank and surge tank; placed drying bed footing, walls, bed laterals, gravel and sand.
- Booster Pump Station – substantial completion now set for December 2023; main concrete drive placed; site grading on-going; continued with electrical at the electrical building; continued with piping and canopy installations at Lake Dunlap Delivery Point.
- Segment A – all pipe is laid except for either side of the Plum Creek crossing; the microtunnel under Plum Creek is complete and pipe will be threaded through and grouted in August; fiber innerduct installation continues on the project.
- Segment B – 87% of the pipe is installed; tunnel under SH-130 is complete. Hydrostatic testing of some of the line between the BPS and San Marcos is complete – still trying to relieve some of the air from the remaining section; continuing laying remaining pipe and building out appurtenances.
- Segment C – USACE approved the environmental report, now on to TWDB for review; final design plans are underway as are acquisitions.
- Segment D – 48% of the right-of-way is cleared; 34% of the pipe has been delivered; 67% of the minor tunnels have been completed; 35% of the pipe is installed including all pipe in Caldwell County; subcontractor has mobilized to drill secant piles for launch shaft of San Marcos River crossing.
- Segment E – 96% of the right-of-way is cleared; pipe manufacturing is underway; the Guadalupe River Crossing pre-construction meeting was held in mid-August and is currently scheduled to begin in October.
- Elevated Storage Tanks – foundation is complete with under slab piping; first ring of pedestal is placed with lifts 2-6 anticipated in August
- Property acquisition is continuing for all parcels in Segments C and the Raw Water properties.





## PROJECT STATUS REPORTS

### PROJECT STATUS REPORT SUMMARY

REPORT DATE

August 4, 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 continues to coordinate with CRWA Staff to assist with the field work data collection. Going forward, UEG will work with CRWA to develop a plan to finalize the data collection process.

Following receipt of all requested as-built information from CRWA, UEG will complete the base scope of services within 8 weeks. Currently \$24,325.00 (34%) 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, the Contractor, and CRWA Staff to finalize the scopes 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 prepared and updated the TxDOT required project information to support the contract changes associated with the bore at Zuehl.

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 has been managing the bid phase portion of the project. A pre-bid meeting is scheduled for August 8, 2023, with the bid opening scheduled for August 29, 2023. The project bid recommendation for award will be presented at the September meetings for award consideration.

The Engineer's Opinion of Probable Project Cost is approximately \$757,050. The project is not fully reimbursable. Of the \$757,050 estimated total project cost, approximately \$259,000 would be reimbursable. Presently, there are no current issues or associated risks with the project.



## memorandum

**To:** Mr. John Kaufman, General Manager  
Canyon Regional Water Authority

**From:** Trihydro Corporation

**cc:** \_\_\_\_\_

**Date:** August 8, 2023

**Re:** Trihydro Corporation – CRWA Engineering Report



Mr. John Kaufman  
June 5, 2023  
Page 2

## **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.
- Project is approximately 74% billed and 90% complete.
- Presently there are not current issues or risks associated with the project.

## **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.
- Presently there are not current issues or risks associated with the project.



# Memo

To: John Kaufman, General Manager  
Canyon Regional Water Authority

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

Date: August 7, 2023

Re: Project Status Report for:  
Hays Caldwell WTP Improvements

---

## **Work in Progress through August 7, 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**
  - *A proposal for grant application was sent to CRWA for review on 8/2/23.*
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 to be resubmitted this week.*
  - *Caldwell County permit coordination meeting was made on 7/24/23. County requested a pre-submittal meeting.*

Mr. John Kaufman  
Project Status Report  
Hays Caldwell WTP Improvements  
August 7, 2023  
Page 2 of 2

- *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.**

- *Lab testing in progress.*

**HCWTP Koch Membrane Replacement Project**

1. Scope of work submitted to CRWA for review.

Bylaws of the  
Canyon Regional Water Authority

Adopted February 1993

Recommended by the Policy Committee

Bylaws

Of the

Canyon Regional Water Authority

Be it hereby resolved and approved by a majority vote of the Board of Trustees of the Canyon Regional Water Authority that these Bylaws of the Authority are hereby enacted upon the date of adoption.



## ARTICLE I – Name and Objects

**Section 1.01** This organization shall be known as the “Canyon Regional Water Authority” hereinafter referred to as the “Authority” created under a special act by the Texas Legislature, under the authority of Article XVI, Section 59 of the Texas Constitution, and enacted through Senate Bill 1735 of the 71<sup>st</sup> Legislature, 1989.

**Section 1.02** The purpose of this organization as defined in section 2.02 of the CRWA Act in Senate Bill 1735 of the 71<sup>st</sup> Legislature, 1989 is as follows:

- (1) to purchase, own, hold, lease, and otherwise acquire sources of a potable water supply;
- (2) to build, operate and maintain facilities for the treatment and transportation of water;
- (3) to sell potable water to local governments, water supply corporations and other persons in this state; and
- (4) to protect, preserve, and restore the purity and sanitary conditions to water in the Authority.

**Section 1.03** The following terms, as used herein, are defined as:

Member Entities: Those organizations that are Members of the Authority and place Members on the Board of Trustees, according to these Bylaws.

Associate Members: Those utilities who share the objectives of and who support the Authority but are not Member Entities or Participating Entities.

Participating Entities: Those entities that execute a Contract to purchase water from the Authority but are not Member Entities.

## ARTICLE II – Membership in the Authority

### A. GOVERNING BODY OF THE AUTHORITY

**Section 2.01** The Authority shall be governed by a Board of Trustees. Each Member Entity shall appoint two representatives to the Board of Trustees. Neither Associate Members nor Participating Entities shall have representatives on the Board of Trustees.

### B. MEMBER ENTITIES

**Section 2.02** The Authority shall consist of Member Entities as defined by Senate Bill 1735 and membership can be added to at any time in accordance with Section 2.03.

**Section 2.03** Entities who wish to join the Authority may file a petition for membership and seek approval from the Authority's Board of Trustees. Upon receiving a valid petition for membership in the Authority, the President shall cause to be called a Public Hearing to consider the request for membership in the Authority. At the Public Hearing, the Board of Trustees may deliberate upon the petition; and, if Membership in the Authority is approved, will define the conditions and/or fees for such membership.

### C. ASSOCIATE MEMBERS

**Section 2.04** Associate Members will pay an initial \$5,000.00 fee upon approval of a petition for Associate membership by the Board of Trustees. Associate Members may appoint one member to the Board of Managers. Associate members shall not be represented on the Board of Trustees.

### D. PARTICIPATING ENTITIES

**Section 2.05** Participating Entities may designate one representative to the Board of Managers (as described below). Participating Entities shall not be represented on the Board of Trustees.

## ARTICLE III – Board of Trustee Officers, Elections, Vacancies

**Section 3.01** Each Trustee shall be appointed in accordance with Senate Bill 1735 by each Member Entity. Said Trustee must be at least 18 years of age and reside as defined by their current driver's license within the territory located in the Authority. The territory of the Authority shall be defined as the certificated area of the Member Entities as defined by the Public Utility Commission. Each Member Entity shall be responsible for determining the eligibility of its appointed Trustee; provided however that the Authority reserves the right to verify Trustee eligibility.



**Section 3.02** Trustees shall take office at the first Board of Trustee meeting in May of each year. A Trustee may not serve more than five consecutive two-year terms of office. If a Trustee is appointed to fill an unexpired term of a vacated seat, such unexpired term shall not be counted for purposes of the five consecutive two-year term limits.

**Section 3.03** Members of the Board of Trustees shall be appointed by resolution of the governing body of the Member Entity not later than April 30<sup>th</sup> of each year. The resolution shall include a statement of eligibility.

**Section 3.04 Attendance**

(a) Any Member Entity whose Trustee fails to attend two consecutive regular Board Meetings will be notified by the Board President. If the Trustee's seat remains unattended at the subsequent Board Meeting for a total of three consecutive Board Meetings, the President of the Board of Trustees will request a replacement from the Member Entity. If the member entity declines to appoint a replacement and absences continue, the Board of Trustees may conduct an election to remove the non-attending Trustee in accordance with section 49.052 (g) of the Texas Water Code.

(b) A Board of Trustee member may participate remotely in a Board Meeting via video-conference call in accordance with Texas Government Code § 551.127 and 551.131 (e) provided that:

- (1) The Presiding Officer is at a fixed location that is announced/noticed in the agenda;
- (2) The remote Trustee is clearly visible, audible, and can interact with the Presiding Officer in a visible and audible manner;
- (3) The same communication process between the remote Trustee and the remainder of the Trustees present is also in place whereby communications are possible and remains throughout the meeting to sustain a quorum. (A quorum must be evident or a point of order noting the absence of a quorum may be called.)
- (4) Participant must have audio and video throughout the meeting.

Each Trustee who attends any executive session of the Board of Trustees or any committee thereof remotely shall be required, at the beginning of such meeting, to attest verbally or in writing that such Trustee is alone and that no third party can view or hear the executive session or comments of any participant therein. The presiding officer in consultation with the CRWA's legal counsel shall determine if any party other than a Trustee shall be present in an Executive Session.

NOTICE: State law (Section 551.146 of the Texas Government Code) provides that a member of a governmental body commits a criminal offense (Class B misdemeanor) and maintains civil liability for knowingly disclosing to the public the certified agenda or recording of a meeting that is lawfully closed to the public under the Texas Open Meetings Act.



**Section 3.05** The officers of the Authority shall be the President, the Vice President, the Secretary, and the Treasurer, selected annually by the Board of Trustees. The Secretary and Treasurer shall be authorized to appoint deputies to assist in their work. (Unless otherwise appointed in writing by the Secretary or Treasurer, the General Manager and staff will fulfill these tasks and duties as necessary.)

**Section 3.06** Officers shall be nominated from the Board of Trustees. The election of officers shall be held at the first meeting of the Board of Trustees in May.

**Section 3.07** There shall be an Executive Committee, pursuant to Section 3.05, comprised of the officers of the Authority. The General Manager of the Authority may meet with the Executive Committee, have no vote, and function as *ex-officio*. The Executive Committee shall provide directions on urgent matters requiring immediate attention to the General Manager.

**Section 3.08** A vacancy in the office of the President shall be filled for the unexpired term by the succession of the Vice President to that office. If a vacancy occurs in other offices of the Authority, it shall be filled by an election at the next regular meeting of the Authority.

#### **ARTICLE IV - Duties of Officers**

**Section 4.01** President. It shall be the duty of the President to preside at all meetings of the Board of Trustees, Executive Committee, or other Committees of the Authority (unless the President appoints another individual to chair a specific Committee, such as the Budget Committee or the Investment Committee;) to appoint all standing and special committees of the Authority; to see that a time and place is arranged for all meetings; to prepare for and post an Agenda for each Meeting (Exception see Section 6.05); and to officiate, as may be required. It shall be the further duty of the President to speak for the Authority in dealing with external entities, the press, etc., at the discretion of the Board of Trustees.

**Section 4.02** Vice President. It shall be the duty of the Vice President to act in the place of the President when the President is unable to be present or unable to act, and to assist the President in the performance of duties.

**Section 4.03** Secretary. It shall be the duty of the Secretary or designee to keep a record of the agendas and minutes of the Authority; to carry on the required correspondence of the Authority; and to assure the dissemination of information from the Authority meetings to the Trustees. It shall be the further duty of the Secretary to assure that the Member Entities are notified of upcoming Trustee elections and vacancies.

**Section 4.04** Treasurer. It shall be the duty of the Treasurer as Chair of the Budget Committee or designee to see that rates for potable water delivered to master meters are based on the actual production cost of providing that product and service including

relevant overhead and capital costs. It shall be the duty of the Treasurer to assess any special fees authorized by the Board of Trustees; to pay the bills of the Authority; to collect all monies owed; to account for all monies collected and expended in behalf of the Authority; to call for an annual audit of the Authority's financial records; and to perform all other financial duties of the Authority.

**Section 4.05** General Manager. The Board of Trustees shall employ a General Manager for the Authority. The General Manager shall be the chief executive of the Authority, and function as provided in the written job description adopted by the Board of Trustees. An evaluation of the General Manager shall be conducted by the Executive Committee with input by the Board of Trustees at least annually. The employment contract will be the controlling document.

## **ARTICLE V – Disbursements and Expenditures**

**Section 5.01** Except as provided by the Disbursement Policy all disbursements and expenditures shall be paid by check or recordable electronic means to evidence two (2) person approval. The President, Vice President, Treasurer, General Manager, and Finance Manager are designated signatories and shall be authorized to sign all authorized and budgeted expenditures. All expenditures must be signed by two of these authorized signatories, one being a Trustee. In the event of a conflict between this article and the Authority's Disbursement Policy, the Disbursement Policy shall be controlled.

## **ARTICLE VI – Time, Place, and Agenda of Meetings**

**Section 6.01** Regular meetings of the Authority's Board of Trustees shall be held at least quarterly, as set from time to time.

**Section 6.02** Regular, Special, or Emergency Meetings of the Authority's Board of Trustees may be called as necessary by any member of the Executive Committee, or by any two Trustees, or by the President.

**Section 6.03** Regular, Special, or Emergency Meetings of the Authority's Board of Trustees shall be noticed and posted in accordance with Chapter 551 of the Texas Government Code.

**Section 6.04.** Meetings of the Authority's Board of Trustees shall be held at 850 Lakeside Pass, New Braunfels, TX, 78130. In emergency situations an alternate location may be designated by the President or Vice President.

**Section 6.05** Special meetings of the Executive Committee of the Authority's Board of Trustees may be called, as necessary, by the President or any Member of the Executive Committee.

**Section 6.06** Agenda items of the Authority's Board of Trustees are determined by the General Manager and President (see Section 4.01); however, agenda items may be added to the agenda if requested by a Trustee.



**Section 6.07** To the extent of any conflict with the Administrative Policies, these Bylaws shall control as the document governing organizational procedures of the Authority and shall be controlling unless state law provides a different requirement.

## **ARTICLE VII – Quorum and Rules**

**Section 7.01** At least fifty percent (50%) of the Trustees will constitute a Quorum. A Quorum of the Board of Trustees must be present to conduct business.

**Section 7.02** All action by the Board of Trustees shall be by a simple majority vote of the Trustees constituting a quorum. The exception is for revision of Bylaws, as provided in Section 8.01.

**Section 7.03** The latest edition of Roberts Rules of Order shall govern the Parliamentary Procedure of all meetings of the Authority unless the Board shall provide to the contrary.

## **ARTICLE VIII – Amendments**

**Section 8.01** These Bylaws may be amended by a fifty percent (50%) affirmative vote of all Trustees.

**Section 8.02** The Secretary must notify each Trustee, in writing, of any proposed changes to these Bylaws. Such written notification must be received by the Trustees at least thirty (30) days before the meeting for which the notice is given.



## ARTICLE IX – Committees and Board of Managers

**Section 9.01** The following standing committees shall exist, and be comprised as follows:

- Executive Committee comprised of the President, Vice President, Secretary and Treasurer of the Board of Trustees.
- Budget Committee comprised of the Treasurer of the Board of Trustees and other Trustees appointed by the President.
- Construction Committee comprised of Trustees and may include members of the Board of Managers appointed by the President; provided that the majority of members of the Construction Committee shall be Trustees. A majority of the Trustees must be present to take action.

Section 9.02 The President shall appoint all Special Committees, assign their members, define their duties, and set dates for performance of assignments.

Section 9.03 The Authority shall maintain a Board of Managers composed of the managers or other designated representative of each Member Entity. Associate Members and participating members may designate a representative to the Board of Managers. The Board of Managers shall have no governing authority but may issue recommendations to the General Manager and Board of Trustees. Meetings of the Board of Managers shall be noticed to the members of the Board of Managers and pursuant to the Texas Open Meetings Act and deliberations shall be based on a consensus of the members, which shall be required for the purpose of making any of its recommendations. The members shall appoint a presiding officer.

**ARTICLE X – Adoption**

**Section 10.01** These Bylaws were adopted by a two-thirds vote of a Quorum of the Board of Trustees of the Authority on February 1993.

**ATTEST TO ADOPTION**

Originally adopted February 1993; and further revised and adopted this \_\_\_<sup>th</sup> day of \_\_\_\_\_, 2023 at a properly noticed meeting of the Board of Trustees.

**Upon verification of a quorum being present, a motion was duly made to adopt these revised Bylaws by Trustee \_\_\_\_\_, seconded by Trustee \_\_\_\_\_, these Bylaws hereby replace and supersede all previously adopted Bylaws and were approved by a vote of \_\_\_ in favor, \_\_\_ opposed, \_\_\_ abstaining, and \_\_\_ absent.**

\_\_\_\_\_  
**President**

(Seal)

\_\_\_\_\_  
**Secretary of the Board**

**Version Control**

DRAFT Bylaws of the Canyon Regional Water Authority originally adopted: 02/1993;

Revised 1/12/95,

Revised 5/13/96,

Revised 10/14/02,

Revised 10/14/13.

Revised xx/xx/xxxx



**CANYON REGIONAL WATER AUTHORITY  
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
08/14/2023	EMPLOYEE SPOUSE AND DEPENDENT HEALTH INSURANCE COST	CRWA 23-08-046

**INITIATED BY**

JOAN WILKINSON / JOHN KAUFMAN

**STAFF RECOMMENDATION**

Approve a CRWA contribution of 50% towards the cost of employee spouse and dependent health insurance costs in FY 2024.

**BACKGROUND INFORMATION**

Employee health insurance costs will increase by 49% in FY 2024 and the Open Enrollment Period is in the latter part of August 2023 (before the start of FY 2024 on October 1, 2023). For eleven (11) CRWA employees who currently participate in the CRWA spouse and dependent health insurance program, the increased cost will total about \$255,686.40, or an average of about \$1,937.02 per employee per month.

To help employees bear these increased costs in the coming FY 2024, Staff recommends the Board approve a 50% cost sharing for employee spouse and dependent health insurance. A 50% cost sharing program will save each of the eleven (11) participating employees about \$968.51 per month on average.

For future fiscal years CRWA will exam other options to address increased health insurance costs.

**FINANCIAL IMPACT**

The financial impact is \$127,843.20 in FY 2024 for approximately eleven (11) employees.

**MOTION**

Motion to approve the following resolution.



**CANYON REGIONAL WATER AUTHORITY**

**RESOLUTION No. 23-08-046**

BE IT RESOLVED that a CRWA contribution of 50% towards the cost of employee spouse and dependent health insurance cost in FY 2024 is approved.

Adopted this 14<sup>th</sup> day of August 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
08/14/2023	DESIGN SERVICES FOR COUNTY LINE SUD TRANSMISSION LINE	CRWA 23-08-047

**INITIATED BY** DAVID McMULLEN / JOHN KAUFMAN

**STAFF RECOMMENDATION**

Approve a Service Order with Gallegos Engineering, Inc. to determine the alignment of a proposed County Line SUD transmission line and its necessary appurtenances extending from the Hays Caldwell WTP to a pipe connection point near the intersection of SH 21 and William Pettus Rd. for a total cost not to exceed \$25,000.00

**BACKGROUND INFORMATION**

Treated water is delivered to County Line SUD from the Hays Caldwell WTP pursuant to a Water Transportation and Wheeling Agreement ("Wheeling Agreement") between CRWA and Maxwell SUD that was executed in 2001. Due to significant population growth and increased water demand in both the County Line SUD and Maxwell SUD service areas, use of the Wheeling Agreement to convey treated water to Maxwell SUD and County Line SUD has resulted in unintended operational issues for both entities. The current volume rate of treated water delivered to County Line SUD also exceeds the volume rate allotted to CRWA under the terms of the Wheeling Agreement.

To help resolve these issues County Line SUD is constructing a 12-inch diameter transmission line along SH 21 from its existing point of delivery near the intersection of SH 21 and 1966 south west along SH 21 to near the intersection of SH 21 and William Pettus Rd where a pipe connection with the City of San Marcos ("City") will be constructed. CRWA understands the City will provide temporary treated water to County Line SUD at this connection. County Line SUD desires that a new 12-inch water transmission line be constructed from the Hays Caldwell WTP north to County Line SUD's new line extension near the intersection of SH 21 and William Pettus Rd.

At present, the anticipated cost to construct the new transmission line ranges from about \$3.7M to \$4.8M depending upon the final alignment, cost of easements and rights-of-way, cost of crossing beneath the rail line, and the prevailing inflation rate that will affect labor, fuel, equipment, and material costs. This cost range does not include a new dedicated high-service pump system that may be needed to push treated water through the new transmission line to County Line SUD.

On August 9, 2023, CRWA was notified by Maxwell's attorney 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."

Gallegos Engineering, Inc. (GEI), which is familiar with the Wheeling Agreement and the transmission line project and is a contracted engineering consultant to CRWA, agreed to prepare a scope of work for the



proposed transmission line project. This scope of work is attached. To initiate the project, CRWA Staff recommends the transmission line alignment be defined. The pipeline alignment will determine the scope of the transmission design (plan and profile) and costs for easements, rights-of-way, and anticipated rail line crossing, and overall construction cost. A Service Order will be prepared and executed pursuant to approval of this resolution.

**FINANCIAL IMPACT**

The financial impact of the alignment definition phase of the project is \$25,000, which will be funded using CRWA's available budgeted engineering funds. The expensed funds will be reimbursed through a Reimbursement Resolution.

Additional funds will be needed for design services, permitting, preparation of construction bid documents, acquisition of easements, rights-of-way, and a possible railroad crossing. The design of a dedicated high-service pumping system at the Hays Caldwell WTP may also be needed.

**MOTION**

Motion to approve the following resolution.

A handwritten signature or mark, possibly initials, located in the lower right quadrant of the page.

**CANYON REGIONAL WATER AUTHORITY**

**RESOLUTION No. 23-08-047**

BE IT RESOLVED that a Service Order with Gallegos Engineering, Inc. (a Texas Corporation) to determine the alignment of a proposed County Line SUD transmission line and its necessary appurtenances extending from the Hays Caldwell WTP to a pipe connection point near the intersection of SH 21 and William Pettus Rd. for a total cost not to exceed \$25,000.00 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 14<sup>th</sup> day of August 2023

Ayes \_\_\_\_ Nays \_\_\_\_ Abstained \_\_\_\_ Absent \_\_\_\_

Approved by: \_\_\_\_\_  
Timothy D. Fousse, CPM  
President

Certified and attested by: \_\_\_\_\_  
Doris Steubing  
Secretary

Gallegos Engineering, Inc. SCOPE OF WORK for County Line SUD Pipeline

1. Project Overview:

- Design construction plans for a water transmission line from the CRWA Hays/Caldwell Plant to the newly constructed County Line SUD water main located near SH 21 and William Pettus Road. This new line will aid CRWA deliver contracted water supply to County Line SUD. The pipeline is to be designed, constructed and in use within a 2-year period.
- The pipeline is expected to stay within Caldwell County and from the CRWA H/C WTP will generally follow CR 102, SH 80, FM 110 and SH 21 to the terminus.

2. Project Description:

- The water pipeline will be designed to TCEQ, CRWA, AWWA standards and will utilize standard engineering practices.
- The final pipeline size will be determined later but will be designed to be no smaller than 12" in diameter.

3. Site Survey and Data Collection:

- Conduct a comprehensive site survey to gather topographic data, soil conditions, and other relevant information.
- Collect data on existing utilities, structures, and other potential obstacles that may impact the pipeline route.

4. Design Criteria:

- Will detail the WTP connection to the existing pump discharge with the new piping. Also will detail the terminus of the pipe line at County Line SUD new water pipeline.
- Consider factors such as contracted flow rate, pressure, water quality, and environmental impact. Will determine if there is additional capacity in whichever pipe diameter is selected to be designed.

5. Hydraulic Analysis:

- Confirm hydraulic calculations to determine the pipe size, pump requirements, and possible pressure zones.
- Evaluate the pipeline's capacity to meet current and future demand.

6. Pipeline Route Selection:

- Propose multiple pipeline route options with their advantages and disadvantages as we deal with Hays County, TxDOT, City of San Marcos, UPRR and possible federal lands.
- Select the most feasible route considering technical, environmental, and economic factors.

7. Design Drawings:

- Prepare detailed design drawings, including plan views, profiles, and cross-sections.



- Ensure the drawings and specifications adhere to industry standards and regulations.

#### 8. Materials and Specifications:

- Specify the materials to be used for the pipeline, fittings, valves, and other components.
- Outline the quality standards and testing procedures for the materials.

#### 9. Structural Design:

- Design and specify any necessary structures, such as pump stations, valves, and control systems.
- Ensure these structures are designed to withstand environmental conditions and operational demands.

#### 10. Environmental and Social Impact Assessment:

- Review any potential environmental impacts and to identify potential effects on the environment and communities.
- Develop mitigation measures to minimize adverse impacts, if any.

#### 11. Cost Estimation:

- Provide a detailed cost estimate for the design and construction of the water pipeline.
- Include all relevant expenses, such as materials, labor, equipment, and contingency.

#### 12. Project Schedule:

- Develop a timeline for the design phase, including key milestones and deliverables.
- Estimate the overall duration of the project.

#### 13. Safety Considerations:

- Address safety measures for both workers and the public during the design and construction phases.
- Comply with safety standards and regulations.

#### 14. Regulatory Approvals:

- Identify the required permits and approvals from relevant authorities and agencies.
- Will submit to appropriate agency's as soon as the plans are complete to obtain any approvals as soon as possible.

#### 15. Quality Assurance and Quality Control (QA/QC):

- GEI and CRWA will review the plans for QA/QC to ensure the design meets the specified standards.
- GEI can provide inspection services if necessary.

#### 16. Project Management:

- Richard Gallegos and or Steven Gonzales of GEI will be in direct communication with John Kaufman and David McMullen of CRWA as the project progresses on all levels.
- The monthly CRWA meetings can be used as regular project updates as design and construction is completed.

17. Documentation and Deliverables:

- GEI to provide construction plans and specifications at the 30%, 60% and 90% completion milestones.
- Deliverables will be in electronic pdf format except for the 100% stage where 5 (five) hard copies of the total contract documents will be delivered.

**CANYON REGIONAL WATER AUTHORITY  
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
08/14/2023	HCWTP NANOFILTRATION IMPROVEMENT PROJECT	CRWA 23-08-048

**INITIATED BY** DAVID McMULLEN / JOHN KAUFMAN

**STAFF RECOMMENDATION**

Approve a Service Order with Ardurra Group, Inc. to initiate design services pertaining to data collection and review under Task 2.0 Membrane Alternative Evaluation of Phase 1 of Ardurra's Detailed Scope of Engineering Scope of Services in support of the Hays Caldwell WTP Nanofiltration Improvement Project at a cost not to exceed \$25,000.

**BACKGROUND INFORMATION**

Ardurra was chosen by the 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, 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 recommends that Ardurra be authorized to initiate design services pertaining to data collection and review under Task 2.0 Membrane Alternative Evaluation of Phase 1 of Ardurra's Detailed Scope of Engineering Scope of Services in support of the Hays Caldwell WTP Nanofiltration Improvement Project at a cost not to exceed \$25,000. 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 \$25,000.00, which will be funded using CRWA's available budgeted engineering funds. The expensed funds will be reimbursed through a Reimbursement Resolution.



**MOTION**

Motion to approve the following resolution.

P

**CANYON REGIONAL WATER AUTHORITY**

**RESOLUTION No. 23-08-048**

BE IT RESOLVED that a Service Order with Ardurra Group, Inc. (a Florida Corporation) to initiate design services pertaining to data collection and review under Task 2.0 Membrane Alternative Evaluation of Phase 1 of Ardurra's Detailed Scope of Engineering Scope of Services in support of the Hays Caldwell WTP Nanofiltration Improvement Project at a cost not to exceed \$25,000 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 14<sup>th</sup> day of August 2023

Ayes \_\_\_\_ Nays \_\_\_\_ Abstained \_\_\_\_ Absent \_\_\_\_

Approved by: \_\_\_\_\_  
Timothy D. Fousse, CPM  
President

Certified and attested by: \_\_\_\_\_  
Doris Steubing  
Secretary

**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 Special Utility District, 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

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## 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

#### 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 six (6) 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.

**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.

**Deliverables:** Internal documentation of technical reviews and response logs

# Attachment A / Detailed Scope of Engineering Services

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## 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

#### 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

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



# Attachment A / Detailed Scope of Engineering Services

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 will be conducted to discuss alternative membrane technologies that may be evaluated for the membrane conceptual evaluation.

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
	Impacts on Water Quality	TBD

**Deliverables:** Workshop agenda and summary.



## Attachment A / Detailed Scope of Engineering Services

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- **Workshop 2 – Alternative Ranking and Selection.** A ½-day 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.

**Deliverables:** Workshop agenda and summary.

### TASK 3.0 – MEMBRANE PILOT STUDY

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.

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.

## Attachment A / Detailed Scope of Engineering Services

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### 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 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.



## Attachment A / Detailed Scope of Engineering Services

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- 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

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
- 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 60%



## Attachment A / Detailed Scope of Engineering Services

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- 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.

### **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.

## Attachment A / Detailed Scope of Engineering Services

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- 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.

#### **4.1.5 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:

- 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



## Attachment A / Detailed Scope of Engineering Services

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- 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 four hours in length.

**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.

**Deliverables:** Workshop Agenda and Review Comment & Response Log

### **TASK 5.0 – TWDB DWSRF FUNDING APPLICATION SUPPORT SERVICES**

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.

#### 5.1. Funding Opportunities Workshop

Engineer will conduct a workshop with CRWA to identify available project funding sources such as TWDB SWIFT, TWDB DWSRF, 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.



## Attachment A / Detailed Scope of Engineering Services

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**Deliverables:** Workshop Agenda and Meeting Minutes

### 5.2. Funding Application Assistance

#### **5.1.1 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.

#### **5.1.2 TWDB DRSRF 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.

#### **5.1.3 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.

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

# Attachment A / Detailed Scope of Engineering Services

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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

## 5.4. 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

## 5.5. 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 6.0 – REGULATORY AGENCY COORDINATION WITH TCEQ AND LOCAL GOVERNMENTAL AUTHORITIES

### 6.1. 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

### 6.2. Local AHJ Coordination Meetings

Engineer will coordinate and attend up to two (2) virtual meetings with CRWA and local authority



## Attachment A / Detailed Scope of Engineering Services

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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

### 6.3. 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

### 6.4. 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 7.0 – WTP BACKGROUND DRAWING DEVELOPMENT

Engineer will develop plant background drawings in AutoCAD using the available PDF Record Drawings provided by CRWA, in conjunction with high-definition 3D laser scanning (Terrestrial LiDAR).

Engineer will perform detailed as-built survey of the interior of the Membrane building using 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.

**Deliverable:** 2D AutoCAD Background Drawings

## TASK 8.0 – 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 Meeting

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.



## Attachment A / Detailed Scope of Engineering Services

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### 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 staff, 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.

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

## Attachment A / Detailed Scope of Engineering Services

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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

**CANYON REGIONAL WATER AUTHORITY  
BOARD COMMUNICATION**

DATE	SUBJECT	AGENDA NUMBER
08/14/2023	HCWTP GRANT APPLICATION SERVICES	CRWA 23-08-049

**INITIATED BY**

DAVID McMULLEN / JOHN KAUFMAN

**STAFF RECOMMENDATION**

Approve a Service Order with Ardurra Group, Inc. for grant management and technical assistance professional services to pursue 404 Hazard Mitigation Program grant funding for the Hays Caldwell WTP floodproofing, elevation, and generators project at a cost not exceed \$46,186.00.

**BACKGROUND INFORMATION**

To help mitigate flooding risks at the Hays Caldwell WTP, funding will be pursued through FEMA's 404 Mitigation program for flood proofing of certain facilities and installation of new generators above the anticipated flood level.

Pursuant to a meeting with the Texas Department of Emergency Management (TDEM) on July 5, 2023, at the Hays Caldwell WTP, segmenting project components in the current TDEM DR 4485 application is recommended. This will provide flexibility for approval of separate project scope items.

Under this Service Order, Ardurra will be tasked with modifying the current DR 4485 application, submit a new application under DR 4705, and submit a separate application under DR 4705 for the two generators at the Hays Caldwell WTP. Ardurra's Scope of Engineering Services for this Service Order is attached. The Service Order will be prepared and executed pursuant to approval of this resolution.

**FINANCIAL IMPACT**

The financial impact is \$46,186.00, which will be funded using CRWA's available budgeted engineering funds. The expensed funds will be reimbursed through a Reimbursement Resolution.

**MOTION**

Motion to approve the following resolution.





**CANYON REGIONAL WATER AUTHORITY**

**RESOLUTION No. 23-08-049**

BE IT RESOLVED that a Service Order with Ardurra Group, Inc. (a Florida Corporation) for grant management and technical assistance professional services to pursue 404 Hazard Mitigation Program grant funding for the Hays Caldwell WTP floodproofing, elevation, and generators project at a cost not exceed \$46,186.00 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 14<sup>th</sup> day of August 2023

Ayes \_\_\_\_ Nays \_\_\_\_ Abstained \_\_\_\_ Absent \_\_\_\_

Approved by: \_\_\_\_\_  
Timothy D. Fousse, CPM  
President

Certified and attested by: \_\_\_\_\_  
Doris Steubing  
Secretary



August 2, 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 Grant Application Services

Dear Mr. Kaufman:

Please accept this letter, together with the accompanying materials to serve as Ardurra's proposal to provide grant management and technical assistance professional services to pursue 404 Hazard Mitigation Program funding for the Canyon Regional Water Authority Hays Caldwell Water Treatment Plant Floodproofing, Elevation, and Generators Project. The proposed scope of services, fee, and schedule are provided within **Attachment A**.

Ardurra is pleased to submit this proposal and we appreciate the opportunity to continue serving CRWA. If you have any questions or need additional information, please do not hesitate to contact me via email at [ysun@ardurra.com](mailto:ysun@ardurra.com), or via phone at 713.208.9463.

Respectfully,

Yue Sun, PE, BCEE  
Group Leader / Project Director

**SCOPE OF SERVICES  
FOR  
Canyon Regional Water Authority  
Hays/Caldwell Water Treatment Plant  
Floodproofing, Elevation, and Generators  
Grant Application Services**

### **BACKGROUND**

The Hays Caldwell Water Treatment Plant (HC WTP), located on the proximity of the San Marcos River, is operated by Canyon Regional Water Authority (CRWA). Past flooding events have shown how vulnerable this plant is during major flood events along the San Marcos River and other extreme weather events. Sheet flow flooding is also an issue to this site due to an open pastureland which is located to the northwest side of the property. These types of floods could inundate various buildings on site, which house all the critical treatment process equipment and electrical components of the plant.

### **PURPOSE**

CRWA began evaluating flood mitigation alternatives following the Memorial Day floods of 2015, which brought records rains to Central Texas. During this event, personnel were not able to reach the site due to the extreme flooding. This event required CRWA to evaluate the flood risk and other risk the facility could encounter during all extreme weather. To help mitigate these risks funding will be pursued through FEMA's 404 Mitigation program to implement the following activities at the HC WTP:

- Installation of new generators and elevating above flood level. (Separate 404 Application)
- Floodproofing Recycle Pump Station
- Floodproofing Chemical Building
- Floodproofing Pump Station
- Floodproofing Electrical Building
- Floodproofing Membrane Building

Per a recent meeting with TDEM on July 5th, 2023, segmenting project components in the current TDEM DR 4485 application is recommended. This will provide flexibility for approval of separate project scope items. Therefore, Engineer proposes to perform the following grant application services:

- Modify the current DR 4485 application.
- Submit a new application under DR 4705.
- Submit a separate application under DR 4705 for the two generators at the HC WTP site.

### **SCOPE OF SERVICES**



# Attachment A

## Detailed Scope of Engineering Services



All tasks shown below will be provided to complete the grant application for the 404 funding.

### **TASK 1 Grant Management and Application**

Engineer will provide assistance and support for grants management and administration as needed for 404 Hazard Mitigation Program and application process. Engineer will perform services and work necessary to complete the following objectives and tasks:

- 1.1 Project Scope Review for 404 application projects – Engineer will meet with CRWA staff as needed to define the proposed scope of work to be completed for each grant application.
- 1.2 Project Initial Cost Estimate & Schedule Review – Engineer will develop the initial grant project cost estimates and completion schedules for input into the grant applications. Project costs will be based upon estimates Already generated by Engineer during their design of the WTP expansion.
- 1.3 Application Process – Engineer will complete the following sections of each grant application based upon understanding obtained by meeting with client’s staff.
  - i. Project eligibility, clear project description including major elements of the project such as contracting, construction, close-out, and PoP.
  - ii. Project objectives include solution hazard reduction, outcome, millstones, and LOE, project staff and management.
  - iii. Damage History, Project Location and Population and Structures Affected by Project
  - iv. Environmental Historical Preservation (EHP) Compliance
- 1.4 Maps – Engineer will develop the maps needed to support the grant applications based upon the project descriptions and locations provided in the CIP and meetings with client staff.
  - i. GIS Maps
  - ii. Drawings/ Design
  - iii. Photos
- 1.5 Complete Budget Worksheet – this will be based upon cost estimates developed by Engineer during the design of the WTP.
- 1.6 Benefit Cost Analysis (BCA) – It is anticipated the BCA will only be required to be performed by Engineer for the Floodproofing/ Elevation and Generators at the Water Treatment Plant.
- 1.7 All Completed Forms (6) – ENGINEER will complete all drafts of supporting forms for execution by CRWA.
- 1.8 Draft and Final Grant Applications – Draft grant applications shall be provided for CRWA staff review. Upon completion of their review, comments from CRWA staff will be addressed and incorporated into the final grant applications. Engineer will coordinate the submittal of the final grant applications on the client’s behalf. Response to any comments on the final grant applications shall be provided as needed.
- 1.9 RFI – Engineer will address up to two RFI correspondences from TDEM and or FEMA for each application.

# Attachment A

## Detailed Scope of Engineering Services

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### Task 2 Project Management & Meetings

- 2.1 Project Meetings – include a Kickoff Meeting and one progress meeting for information request and progress update.
- 2.2 QAQC - Internal technical review and quality assurance and quality control review.
- 2.3 General Project Management and Administration – Miscellaneous project management and administration, budget, schedule management, invoicing etc.

### Task 3 Additional Services

The following additional services will be performed when authorized by CRWA in writing for an additional fee as agreed upon by CRWA and the Engineer.

- 3.1 Additional RFI correspondence from TDEM and or FEMA outside of those listed herein.
- 3.2 Applications for each offsite generator. Review available data/information of the 7 off-site generators provided by CRWA. After reviewing the available data/information, Engineer will decide how to better group projects/sites for each application.

### Deliverables

- A draft application will be submitted to the CRWA. The application will be completed based on the tasks and application requirements described above. CRWA will review the draft and provide comments for revision and finalization.
- A final draft version of the applications will be issued within 4 weeks after Notice to Proceed.
- The final applications will be uploaded before the application deadline on November 3, 2023.

### FEE SUMMARY

Payments to Engineer shall be based on a lump sum basis as shown in the attached Level of Effort fee estimate.

### SCHEDULE

The services of Engineer shall commence immediately upon receiving of Notice to Proceed. Draft applications shall be provided for CRWA to review within 4 weeks after Notice to Proceed, and Final applications shall be uploaded before November 3, 2023.

Level of Effort Fee Estimate  
 Project: Canyon Regional Water Authority Hays Caldwell Water Treatment Plant 404 HMGP Grant Applications  
 Consultant: Ardurra Group, Inc.

		Ardurra Estimated Man-hours											Ardurra Subtotal			
Task	Subtask	Task Description	Principal/Program Manager	Subject Matter Expert	Compliance Manager 2	Compliance Analyst 4	Compliance Manager 1	Project Manager 2	Mitigation Specialist 1	Mitigation Specialist 2	Mitigation Specialist 3	Inspector 1	Document Manager 2	Admin	Ardurra - Total Hours (Hrs)	Ardurra Subtotal Labor Cost (\$)
			Rate \$ 240.00	\$ 240.00	\$ 172.00	\$ 151.00	\$ 146.00	\$ 182.00	\$ 192.00	\$ 166.00	\$ 130.00	\$ 104.00	\$ 88.00	\$ 104.00		
<b>TASK 1. Grant Management and Application</b>																
	1.1	Project Scope Review	8				12								20	\$ 4,104.00
	1.2	Project Initial Cost Estimate & Schedule Review	6				12								18	\$ 3,624.00
	1.3	Application		6			36								42	\$ 6,696.00
	1.4	GIS Maps, Drawings/ Design, & Photos					12					12			24	\$ 2,808.00
	1.5	Completed Budget Worksheet	4				18								22	\$ 3,588.00
	1.6	Benefit Cost Analysis	4				18	10							32	\$ 5,408.00
	1.7	All Completed Forms (6)	6				18					12			36	\$ 5,316.00
	1.8	EHP Checklist, Compliance, & Supporting Documentation					30								30	\$ 4,380.00
	1.9	Follow-up/Response to TDEM Comments	4				12								16	\$ 2,712.00
		Expenses (5%)														\$ 1,940.00
<b>TASK 2. Project Management and Meetings</b>																
	2.1	Project Meetings	6				6								12	\$ 2,316.00
	2.2	QA/QC	2	4											6	\$ 1,440.00
	2.3	Project Administration (schedule, budget, invoicing etc.)	4										6		10	\$ 1,584.00
		Expenses (5%)														\$ 270.00
<b>TOTAL BASIC SERVICES</b>																
<b>TASK 3. Additional Services</b>																
	3.1	Additional RFIs	4	8			12								24	\$ 5,064.00
	3.2	Additional Applications for Off-site Generators (up to two)	8	12		90	24					8	12		154	\$ 24,260.00
		Expenses (5%)														\$ 1,470.00
<b>TOTAL ADDITIONAL SERVICES</b>																
															<b>TOTAL BASIC + ADDITIONAL SERVICES</b>	<b>\$ 30,794.00</b>
																<b>\$ 76,980.00</b>