MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE

BACA GRANDE WATER AND SANITATION DISTRICT

March 20, 2024 - 9:00 A.M.

District Office – 57 Baca Grant Way South

Crestone, Colorado 81131 Meeting held via Zoom

ATTENDANCE

Directors in Attendance: Also in Attendance:

Vivia Lawson Marcus Lock, District Legal Counsel John Loll Diego Martinez, District Manager

Mike Smith Natalie DeBon, Administrative Manager

Rick Hart Gary Potter, Director of Utilities

David Karas Cathy Fromm, District Accountant (for a portion of the meeting)

Nicholaus Marcotte, Element Engineering

(for a portion of the meeting)
Community Members and Guests:

Dan Gray

Matthew Eric Lit Anya Kaats

Alba

CALL TO ORDER

President Lawson called the meeting to order at 9:03 A.M.

Board Roll Call: All Directors were present. Director Smith joined the meeting at approximately 9:10 A.M.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

Members of the Board were requested to disclose any potential conflicts of interest with regard to any matters scheduled for discussion at this meeting. No potential conflicts were disclosed.

AGENDA

MOTION: FOLLOWING DISCUSSION, UPON MOTION DULY MADE BY DIRECTOR LOLL, SECONDED BY DIRECTOR KARAS AND UPON VOTE, UNANIMOUSLY CARRIED, THE BOARD APPROVED THE AGENDA.

CONSENT AGENDA

The Board considered the following consent agenda items:

- REVIEW AND ACCEPT UNAUDITED FINANCIAL STATEMENTS FOR THE PERIOD ENDING FEBRUARY 29, 2024 AND CURRENT SCHEDULE OF CASH POSITION.
- APPROVE MINUTES FROM THE JANUARY, 2024 REGULAR MEETING
- APPROVE MINUTES FROM FEBRUARY, 2024 REGULAR MEETING

MOTION: FOLLOWING DISCUSSION, UPON MOTION DULY MADE BY DIRECTOR HART, SECONDED BY DIRECTOR KARAS AND UPON VOTE, UNANIMOUSLY CARRIED, THE BOARD APPROVED THE CONSENT AGENDA.

PUBLIC COMMENT (ITEMS NOT ON THE AGENDA ONLY. NO ACTION MAY BE TAKEN).

In accordance with the Colorado Open Meetings Law, no Board action will take place until a later date, if necessary. Please limit your comments to three minutes or less.

Mr. Gray voiced his concerns about the Town of Crestone's financial problems. He pointed out issues like misusing town funds, not following laws and regulations, and inadequate legal support due to budget constraints. Mr. Gray also asked about negotiations between the Town of Crestone and the District, and urged the Board to keep everyone informed. Mr. Gray also inquired about the projected property tax funds for the District.

FINANCIAL MATTERS

<u>Check Register:</u> The Board discussed and considered approval of the check register through the period ending March 20, 2024 as follows:

General	\$ 6,833.00
Capital	\$ 15,373.45
Enterprise	\$ 79,659.90
_	\$ 101.866.35

Mr. Hart asked about the \$12,653.45 meter expense item on the check register. Mr. Potter replied that it is a capital expense for a handheld device used by operations for meter installations and meter readings.

MOTION: FOLLOWING DISCUSSION, UPON MOTION DULY MADE BY DIRECTOR HART, SECONDED BY DIRECTOR SMITH AND, UPON VOTE, UNANIMOUSLY CARRIED, THE BOARD APPROVED THE CHECK REGISTERS FOR THE PERIODS ENDING MARCH 20TH, 2024.

Board of Director Matters:

President Lawson addressed public comment regarding the budget and property tax increases and ongoing negotiations with the Town of Crestone. She mentioned that the budget details were discussed during prior Board meetings, and they are available on a website and reflected in the minutes. Regarding the Town of Crestone, President Lawson said there has been minimal interaction due to the town's situation, including a new mayor and potentially new legal counsel.

Engineer's Report

The Board reviewed and discussed Engineer's report incorporated in the Board packet, attached to the minutes as supporting document.

Wastewater Treatment Plant:

During the Engineer's report, President Lawson asked Mr. Marcotte how he reconciles the previously high loading numbers that prompted the planning for the new plant with the current lower levels, and whether he knows the cause. Mr. Marcotte responded that he doesn't know for sure and can only speculate. He mentioned potential reasons like loading from various locations in the collection system, possible RV dumping, or variations due to different sampling procedures. He highlighted the difficulty in pinpointing causes.

Water Loss Prevention Project:

The revised bid from Cooley & Sons Excavations was reviewed. The importance of the project was discussed, as well as the project budget and the required funds. The Board made the following motion:

MOTION: FOLLOWING DISCUSSION, UPON MOTION DULY MADE BY DIRECTOR HART, SECONDED BY DIRECTOR SMITH AND UPON VOTE, UNANIMOUSLY CARRIED, THE BOARD APPROVED TO AWARD COOLEY & SONS EXCAVATING THE BID IN THE AMOUNT OF \$180,000 TO COMPLETE THE METER INSTALLATION PROJECT.

STAFF REPORTS

The Board reviewed and discussed the reports incorporated in the Board packet, the staff reports are attached to the minutes as supporting documents.

Town of Crestone:

Town of Crestone draft discharge permit was discussed during Mr. Martinez's report. With no comments received from the town regarding the draft discharge permit, the Board directed counsel to follow up with the Town's attorney.

Aspen Waste Water Treatment Plant (WWTP) 2018-2023 Violations Overview:

The Board and Staff discussed the WWTP violations, a detailed report is attached to the minutes. Also discussed were practices/procedures implemented to prevent wastewater violations. President Lawson inquired about the specific actions taken by staff to prevent violations going forward. Vice President Loll discussed the importance of real time monitoring and automation of the treatment process.

Legal Matters:

Mr. Lock provided the Board with legal updates, including progress on the inclusion of 1512 Antelope Way. District staff and legal counsel are cooperating with the property owner to have the inclusion petition filed with the District. Mr. Lock also Advised the Board that some comments on the draft IGA had been received from the Town's attorney, and Mr. Lock intended to follow up with the Town's attorney given the absence of any feedback on the draft discharge permit. The recent meeting with USFWS was also discussed. The parties have made significant progress over the past few months towards a long-term amendment to the Water Service Agreement. However, there are still some key issues that remain unresolved. The parties intend to continue working cooperatively to reach an agreement on these remaining issues. Mr. Lock also spoke of the new rule regarding website accessibility for people with disabilities. The compliance deadline is July 1, 2024.

EXECUTIVE SESSION

Motion: Upon motion duly made by Director Smith, seconded by Director Loll and, upon an affirmative vote of at least two-thirds of the quorum present, the Board moved to adjourn to executive session pursuant to C.R.S. § 24-6-402(4) (a), (b), and (e), which respectively concern, the purchase or lease of real property, specific legal advice from counsel, and

determining positions relative to matters subject to negotiation regarding the Water Service Agreement with the United States Fish and Wildlife Service, and consideration of an executive session to discuss the District's continuity of operations plan pursuant to C.R.S. § 24-6-402(4)(d), which authorizes an executive session to discuss specialized details of security arrangements or investigations, including defenses against terrorism, both domestic and foreign, and including where disclosure of the matters discussed might reveal information that could be used for the purpose of committing, or avoiding prosecution for, a violation of the law.

MOTION: DIRECTOR LOLL MOVED; DIRECTOR SMITH SECONDED, AND THE BOARD VOTED UNANIMOUSLY TO ADJOURN TO EXECUTIVE SESSION. THE BOARD RECONVENED IN REGULAR SESSION AT 11:24 A.M.

ADJOURNMENT:

There being no further business to discuss, upon motion duly made Director Hart, seconded by Director Smith and upon vote, unanimously carried, the meeting was adjourned at 11:25 A.M.

THE NEXT REGULAR MEETING IS SCHEDULED FOR April 17, 2024

Drafted by Natalie DeBon	
Respectfully submitted,	
Diego Martinez	

THESE MINUTES ARE APPROVED AS THE OFFICIAL March 20th, 2024 MINUTES OF THE BACA GRANDE WATER AND SANITATION DISTRICT BY THE BOARD OF DIRECTORS SIGNING BELOW:

Vivia Lawson	 	 	
John Loll			
Mike Smith	 		
Rick Hart			
David Karas			

ATTORNEY STATEMENT

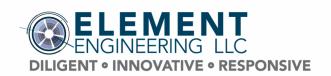
Regarding Privileged Attorney-Client Communication

Pursuant to §24-6-402(2) (d.5) (II)(B), C.R.S., I attest that, in my capacity as the attorney representing the Baca Grande Water and Sanitation District, I attended the executive sessions on March 20, 2024, and it is my opinion that the portion of the executive session that was not recorded constituted attorney-client privileged communications.

Marcus J. Lock

General Counsel

Baca Grande Water and Sanitation District



MONTHLY ENGINEER'S REPORT

DATE OF MEETING: MARCH 20, 2024

CLIENT: BACA GRANGE WATER & SANITATION DISTRICT (BGWSD)

SUBJECT: MONTHLY ENGINEER'S REPORT NEW ITEMS IN BOLD

GENERAL ENGINEERING (PROJECT NO. 0001)

The district's discharge permit expires on November 30, 2024. A discharge permit application must be filed six months prior to the termination of the permit. Therefore, the permit application is due on May 30, 2024. Element will assist the district with the discharge permit application. Currently the district has an individual permit. If it is possible, Element recommends the district apply for a general permit as there are several benefits of a general over an individual. We are currently reviewing if the district is eligible for a general permit.

We are currently working on the general permit renewal application and plan to have that sent to the district for review by the end of February.

Element is assisting the district with an application for the FY2024 Water Smart grant. This application will be written in support of a project to replace outdated water meters and install meters and meter pits where meters are located in homes. The grant is due by February 22nd.

The Water Smart grant application for meter replacements was submitted. Element continues to work with the district on compiling the discharge permit renewal application and associated documentation.

WATER AND WASTEWATER MASTER PLAN UPDATE (PROJECT NO. 0009)

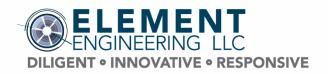
The Water and Wastewater Master Plan Update document has been finalized in draft format and provided to the BGWSD staff and board for review.

The master plan was approved by the district board in September 2022. The district approved Water and Wastewater Master Plan culminated in recommendations for water and wastewater system improvements. These recommendations are being included in the Wastewater Treatment Plant Improvements (Project No. 0010) and Water Treatment Plant Improvements (Project No. 0011) projects. Status reports on these projects are presented under their respective project numbers.

The master plan also included recommendations for water loss reduction. Reporting on progress for this item is listed under General Engineering (Project No. 0001). As the master plan document itself has been approved, and action is being taken on the master plan recommendations, no additional updates will be included on this project number.

WASTEWATER TREATMENT PLANT IMPROVEMENTS (PROJECT NO. 0010)

Element has provided the district with a proposal to complete a Wastewater Treatment Plant (WWTP) Improvements Preliminary Engineering Report and Environmental Report. The report will be assembled for



United States Department of Agriculture (USDA) Rural Development (RD) funding of a new or upgraded/expanded WWTP. A preliminary schedule for the proposed project is shown below. Note that this schedule may vary widely based on review time by CDPHE and USDA as each entity reviews and processes the required submittals.

• Compile and submit Preliminary Engineering Report December 2022 (Includes ER and RD Apply funding application)

• USDA review and funding/underwriting January 2023 – July 2023 (Note this timeline is assumed and is shown conservatively long)

USDA Letter of Conditions Coordination
 Design, CDPHE and local permitting
 July 2023 – September 2023
 September 2023 – August 2024

Bidding
 November 2024

Construction
 March 2025 – March 2026

Element was approved on the wastewater PER/ER in the district's September special meeting. We intend to meet the deadline for the PER/ER of the end of December 2022.

The PER was submitted to district staff for review in December of 2022. We are working to schedule a staff review meeting prior to updating the draft for submittal to the board for review. It is expected that the PER will be submitted to the board for review in late January or early February.

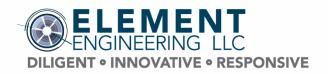
The PER was reviewed with staff on January 23, 2023. An updated PER has been provided to the district along with a PER summary handout. A work session to review the PER has been scheduled for Thursday February 23rd. USDA has informed Element that, based on the suggested project scope, an Environmental Report is required. Our original goal was to demonstrate that this was not required due to the fact that the disturbance would all occur at existing project locations, however, after review USDA has required the ER to be compiled and submitted as part of the project. Our current proposal has funding for this work but excludes State Historic Preservation Act site surveys. If a survey is required, we will let the district know and pass that on with no markup.

After review of the PER by the board, and any necessary updates, the PER and ER will be submitted to USDA, along with the RDApply application to finalize the grant and loan funding request.

The PER was reviewed at a board special meeting on February 23rd, 2023. The board approved moving forward with the project and completing the RDApply application. Element is in the process of compiling the required Environmental Report. The Environmental Report and RDApply application will be completed by the end of April 2023. Please note that the Environmental Report requires 30 and 45-day review periods for various state, federal, and tribal agencies for review and comment on the project scope.

The Environmental Report (ER) has been drafted. We are waiting for final responses from the State Historic Preservation Office (SHPO) and other agency responses to finalize the ER. The RDApply application is being processed and drafted by Element and district staff.

The RDApply application and Preliminary Engineering Report have been finalized in draft format. The Environmental Report is nearly complete. We are finalizing correspondence with the State Historic Preservation Office (SHPO). Further environmental compliance reporting may be required, and we are



scheduling a meeting with SHPO to determine the necessary scope of this additional work, if any. It is anticipated we will finalize our conversations with SHPO by the end of May.

The USDA funding application has been completed. The PER and ER have been submitted to USDA. We are now waiting for the USDA underwriting process to be completed. USDA will generate a letter of conditions that outlines the funding package grant/loan combination.

USDA provided their review comments of the PER and ER. Element has completed the comment responses and resubmitted the reports. The comments were minor and did not necessitate major changes to either report.

At the December meeting it was requested that Element provide a proposal to complete an updated evaluation of the alternatives (improvements to existing facility and replace existing secondary unit processes). This was based on newer data showing that a facility expansion may not be necessary. A proposal for this evaluation is attached to this board report.

We are finalizing the updated alternatives analysis. It is expected to be completed by the end of February for staff review followed by presentation at the district's March meeting.

We have been informed by USDA that the funding application will be processed approximately 45-days after a budget is passed by the United States House of Representatives. Currently the House is operating under a continuing resolution. Until a budget is passed, no funding can be processed.

A draft of the alternatives analysis was submitted to district staff and a meeting held to review and discuss. The updated alternatives analysis memorandum has been completed and submitted to district staff.

WATER TREATMENT SYSTEM IMPROVEMENTS (PROJECT NO. 0011)

The Water and Wastewater Master Plan Update recommended a water project be completed including the following:

- Integrate the Motel Well and Booster Pump Station into the large BGWSD system.
- Increase Water Treatment Plant (WTP) Pumping Capacity
- Add Administrative Building for district.

It is recommended that these projects be funded through the Colorado Department of Health and Environment (CDPHE) State Revolving Fund (SRF) Loan Program. Upon completion of the WWTP PER and ER the funding process for the water system improvement project should begin. A preliminary schedule for the proposed project is shown below. Note that this schedule may vary widely based on review time by CDPHE.

• Compile and submit pre-qualification form (CDPHE funding)

• Compile and submit Project Needs Assessment

• CDPHE review and design and engineering grant execution

• Design, CDPHE permitting

• CDPHE funding coordination and loan execution

Bidding

Construction

December 2022

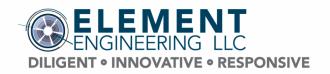
April 2023

July 2023

August 2023 – March 2024 February 2024 – April 2024

April 2024

June 2024 – December 2024



The pre-qualification form was submitted in December of 2022. A pre-qualification meeting has been scheduled with CDPHE, DOLA, BGWSD, and Element staff on Tuesday January 31st at 10:00. The pre-qualification meeting is the next step in the CDPHE funding process where all entities discuss the proposed project and review the steps in the funding process.

The prequalification meeting was held to discuss the CDPHE funding process specific to the BGWSD water project. The district qualifies for a planning grant of \$10,000 to support compilation of the Project Needs Assessment. The planning grant requires a local match of \$2,500, for total funding of \$12,500 for the Project Needs Assessment. The Project Needs Assessment (PNA) is an engineering planning document similar to the PER but compiled in a format and form acceptable to CDPHE. Element has compiled a proposal to complete the PNA on behalf of the district.

The draft PNA is nearly complete with an internal (Element) review by the middle of April. We are on target to provide the draft to district staff by the end of April.

CDPHE has provided a pre-qualification review letter after our January pre-qualification meeting. The review letter (dated April 19, 2023) is attached to this report. This letter clarifies that the district is eligible for a planning grant (already obtained), a design and engineering grant, and Bipartisan Infrastructure Law (BIL) funding.

Element finalized a draft of the PNA and transmitted it to district staff on May 9, 2023. It is recommended the district board schedule a work session or special meeting to review the final PNA during the month of June. In the meantime, Element and district staff will work to resolve any initial questions and/or comments.

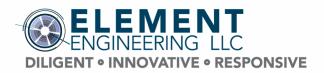
The draft PNA is scheduled to be reviewed by the district at an August 23rd meeting. A handout summarizing the PNA has been transmitted to district staff for board distribution.

The district approved submittal of the PNA at the August 23rd meeting. Element has coordinated with district staff and the PNA has been submitted to CDPHE. We are awaiting CDPHE review of the document. Element will respond to any questions or CDPHE comments.

The PNA has been approved. See the attached approval letter.

We have been exchanging email correspondence with CDPHE regarding the district's potential Design and Engineering grant (D/E grant) for the drinking water project. The proposed budget from the US Congress is significantly cutting the EPA capitalization grants to the various state SRF programs. Therefore, CDPHE is unsure if they will have D/E grants available and may not know the available amount until September of 2024.

CDPHE will, however, allow the district to recoup funds spent on design and engineering costs from the construction loan, when it is issued to build the project. This would mean funding the design of the project upfront and recouping the costs at the time of construction. The district may apply for a DOLA grant to fund up to half of the design related costs. Therefore, the two options moving forward are as follows:



- 1. Self-fund the design of the water project and reimburse yourself with funds from the construction loan when the project design is completed and goes to construction. In this case we could potentially apply to DOLA for a 50/50 match grant for design.
- 2. Wait to see if D/E grant funds become available later in the year and proceed accordingly if one is awarded. If those funds are not available, re-consider item number 1 above.

The design and engineering costs associated with the water system project is \$108,370.00. Therefore, the district could apply for a DOLA grant in the amount of \$54,185.00, which would be a Tier II grant. The upcoming DOLA cycle begins accepting applications on March 1 and closes on April 1. Awards are estimated to be made by July of 2024. Note that if the district intends to use this grant, no work can begin until the grant contract is executed.

The district has selected to apply for a DOLA grant during the March 1 - April 1 application period to support design. Element will assist the district in completing the grant application.

2023 WATER LOSS PREVENTION PROJECT (PROJECT NO. 0013)

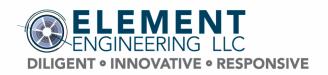
Element staff are periodically working with district staff in developing a water loss prevention program. It is likely that this prevention program will take several months to collaboratively develop prior to presentation by district staff and Element to the board. Element is assisting the district in assembling cost estimates for PRV vault and water main replacement program. Our initial meeting has identified the following items to focus on:

- PRV Vault Cost Estimate
- Metering Vault Cost Estimate
- Cost Estimate 1,000 Feet of Main (General)
- Meter Inventory (Ages, Visual Inspection)
- Unmetered Service Survey
- Testing Meters
- Leak/Break Fix Map
- Water Main Replacement Program

District staff is interested in applying for Saguache County grant funds to potentially pay for relocation of PRVs and installation of flow meter vaults to study. Potential uses for this grant money is installation of metering vaults, PRVs, and water shutoff valves to better isolate for breaks. Also, money could be used for leak detection equipment. A cost estimate of a PRV and metering vault has been provided to district staff for review.

Element has been released on design services of the PRV relocation, new PRV installation, and two new meter vaults. Element is completing design and bidding documents so the project can be publicly bid. We are currently waiting for the field survey work to be completed in order to finalize our draft documents for internal review.

We have received the survey and are finalizing the water loss prevention project deliverable design documents for review by district staff.



We created a cost estimate for replacement of the receiving manhole of the Wagon Wheel Lift Station with a polymer manhole that is corrosion resistant.

We have finalized the water loss prevention plans and met with district staff to review. Upon approval of the drawings the next step is project bidding. The project may be advertised and bid in early 2024 if desired by the district.

The project plans have been finalized and approved by the district. The following bid schedule for this project is as follows:

Advertisement Published	Week of January 22 nd
Plans/Specifications Available	January 26 th at 4:00 PM
Bids Due (via email to Element)	February 19 th at 4:00 PM
Review Bids at Board Meeting	February 21 st
Notice of Award	February 23 rd (estimated)
	Plans/Specifications Available Bids Due (via email to Element) Review Bids at Board Meeting

Bids for the project will be presented at the district's February 21st board meeting.

Element and district staff requested that Cooley and Sons revise their bid to only include the two meter installations and the required mobilization. The revised bid table is attached to this report. This will allow the project to fall within the district's budget and gain valuable data to dial in water loss by geographic area.



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DUIGEN	Te	INNOVATIVE	RESPONSIVE

Item No.	Estimated Quantity	Unit	Description	Unit Price	Total Price
1	1	LS	Mobilization/Demobilization, Site Restoration, Traffic Control, and Erosion Control as per Plans and Specifications	\$ 15,000.00	\$ 15,000.00
2	1	LS	Furnish and Install Indian Wells Way Flow Meter and Vault as per Plans and Specifications	\$ 83,500.00	\$ 83,500.00
3	1	LS	Furnish and Install Well 18 Flow Meter and Vault as per Plans and Specifications	\$ 81,500.00	\$ 81,500.00
4	1	LS	Furnish and Install North Carefree Way PRV and Vault as per Plans and Specifications		
5	1	LS	Furnish and Install Camino Del Rey Relocated PRV and Vault as per Plans and Specifications		
		\$ 180,000.00			

gc

Bidder acknowledges that:

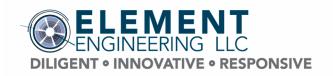
- 1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
- 2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

- 5.01 Bid Acceptance Period
 - A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.
- 5.02 Instructions to Bidders
 - A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.
- 5.03 Receipt of Addenda
 - A. Bidder hereby acknowledges receipt of the following Addenda:



MEMORANDUM

To: Baca Grande Water and Sanitation District

FROM: Element Engineering

DATE: February 2024

Subject: Wastewater Treatment Plant (WWTP) Alternatives Analysis Update

1 INTRODUCTION

Element Engineering, LLC (Element) understands that the BGWSD wishes to compile an updated WWTP Alternatives Analysis based on recent raw wastewater data. This data shows that the influent organic loading to the plant has been falling. Element recently completed and submitted a Preliminary Engineering Report (PER) to USDA for project funding. This PER recommended replacement of the existing secondary treatment process, and expansion of the facility's organic rating. Recent data, however, shows that an expansion may not be necessary.

Therefore, the district would like an updated alternatives analysis of the two primary alternatives without considering increasing the hydraulic or organic loading rates. The two primary alternatives are as follows:

- 1. Rehabilitation of the existing WWTP facility and process building (PER Alternative III)
- 2. Replacement of the existing WWTP secondary treatment system and construction of new structures and equipment (PER Alternative IV)

2 RECENT DATA ANALYSIS

The existing influent organic limit at the AIWWTF is 300 lbs BOD per day. Based on the influent hydraulic loading of 0.15 MGD, this was calculated based on an influent BOD concentration of 240 mg/L. The Preliminary Engineering Report (PER) reviewed data from 2018 – May 2022. Data available during the compilation of the PER showed that the district surpassed the allowable organic loading three times over the period analyzed. The PER suggest a re-rating of the facility to an influent hydraulic limit of 0.175 MGD to account for projected growth over the next 20 years, and an increase to the organic loading to 511 lbs BOD/day to address exceedances of the existing permitted organic loading.

However, more recent data from 2023 shows consistent compliance with the influent organic limit. Table 1 summarizes the influent flow and loading to the district's WWTP for 2023. All discharge monitoring report (DMR) data for 2020 through 2023 attached to this memo.



Table 1: Influent Flow and Loading - 2023

	Influent									
	Flow	BOD								
	MGD	mg/L lbs/day								
		30 Day Average								
	0.15		300							
Permit Limit	0.14		285							
	0.12		240							
Jan-23	0.063	262	139							
Feb-23	0.068	283	156							
Mar-23	0.062	282	145							
Apr-23	0.064	208	105							
May-23	0.066	240	125							
Jun-23	0.069	255	148							
Jul-23	0.069	318	132							
Aug-23	0.066	236	127							
Sep-23	0.069	156	88							
Oct-23	0.063	174	93							
Nov-23	0.062	236	119							
Dec-23	0.063	248	129							
Average	0.065	241	126							
Maximum	0.069	318	156							

During 2023, no exceedances of the 80% threshold of the influent hydraulic nor organic limit were reported. This recent data indicates that an increased hydraulic and organic rating for the facility is not necessary.

3 UPDATED ALTERNATIVES ANALYSIS

The costs presented in the PER reflected the proposed increase to hydraulic and organic rating. This memo will provide costs reflecting improvements without modification to the hydraulic and organic rating. The following section presents improvement alternative costs assuming that the permitted hydraulic limit remains at 0.15 MGD and the permitted organic limit remains at 300 lbs BOD per day.

3.1 REHABILITATION OF EXISTING WWTP FACILITY AND PROCESS BUILDING (PER ALTERNATIVE III)

Alternative III – "Expansion and Improvements to the Existing WWTF" is described in detail in the PER. In summary, the alternative includes the construction of a third Fluidyne SBR treatment train, improvements to the existing AIWWTF building, automation of WAS pumping with the addition of WAS pumps and controls, facility instrumentation and controls (SCADA), a new decanting system for the existing Fluidyne SBR trains, and a new UV system. Additionally, the alternative includes replacement of the existing HVAC system in the headworks building, replacement of all electrical systems that are not rated as explosion proof, rehabilitating structural settling issues, installation of a new control system, addressing EQ basin access, addressing potential mold issues, addressing the lack of UV redundancy, and integration of WAS



piping and pumping to the sludge pond and drying bed. Note that further improvements to the facility are likely to be necessary in the next 10 years to meet future nutrient limits if this alternative is selected.

This alternative includes additional operation and maintenance, and facility repair costs as existing and old equipment is being utilized. Also, it is important to note that this alternative comes with the inherent risks of designing and upgrading an existing facility that was not originally built to code and has been in operation for many years.

To modify this alternative to reflect no change to the hydraulic or organic loading limits, the following modifications to the cost estimate have been made:

- Elimination of proposed additional third Fluidyne SBR treatment train including:
 - o Excavation
 - Concrete
 - Secondary Building Addition
 - Tank Handrails, Hatches, and Grating
 - o New SBR Equipment
- Reduction in soft costs to reflect change to construction scope
- Reduction to operations & maintenance costs to reflect removal of third treatment train

Table 2 presents the revised construction cost estimate for Alternative III – Rehabilitation of Existing WWTP Facility and Process Building without expansion. Table 3 presents the revised operations and maintenance costs for the same alternative.



Table 2: Alternative III – Rehab Existing AIWWTF – Updated Construction Cost

	Alternative III - Rehab Existing AIWWTF							
	CONSTRUCTION ITEMS							
Item	Description	Quantity	Units	U	Jnit Price		Cost	
	Lift Station Emergency Power		•					
1	Emergency Generator & Automatic Transfer Switch (Lift Stations)	3	EA	\$	250,000	\$	750,000	
	Aspen Institute WWTF Upgrades		•					
1	Excavation	0	CY	\$	40	\$	-	
2	Concrete (SBR Tank & Aerobic Digester)	0	CY	\$	1,100	\$	-	
3	Existing Building Foundation and Slab Structural Repairs	1	LS	\$	150,000	\$	150,000	
4	Secondary Treatment Building Addition (PEMB, Slab, Foundation)	0	SF	\$	110	\$	-	
5	Headworks Building Replacement of HVAC	1	LS	\$	185,000	\$	185,000	
6	Tank Handrails, Hatches, and Grating	0	LS	\$	150,000	\$	-	
7	New SBR Equipment (Decanters, Blowers, WAS Pumps, Mixers, Aeration Grid)	0	LS	\$	810,000	\$	-	
8	Disinfection (UV)	1	LS	\$	292,500	\$	292,500	
9	Process Piping and Valves	1	LS	\$	185,000	\$	185,000	
10	Yard Piping, Manholes, and Valves	1	LS	\$	95,000	\$	95,000	
11	Emergency Generator & Automatic Transfer Switch (WWTF)	1	EA	\$	250,000	\$	250,000	
12	WAS Automated Pumps (ISAM to Sludge Holding Pond)	2	EA	\$	45,000	\$	90,000	
13	Sludge Transfer Automated Pumps (Sludge Holding Pond to Sludge Drying Bed)	2	EA	\$	95,000	\$	190,000	
14	WAS & Sludge Transfer Piping & Valves	1	LS	\$	30,000	\$	30,000	
15	ORP Probe	1	LS	\$	10,000	\$	10,000	
16	DO Probe	1	LS	\$	10,000	\$	10,000	
17	Replace Existing SBR Decant Equipment	1	EA	\$	279,000	\$	279,000	
Subtotal Construction Items							2,516,500	
Mobilizat	ion/Demobilization					\$	125,825	
Erosion C	ontrol/Site Restoration					\$	62,913	
Traffic Co	ontrol					\$	25,165	
Electrical	(Including Updating Existing Secondary Treatment Building to Proper Codes)					\$	301,980	
Instrume	ntation and Controls (WWTF PLC & SCADA)					\$	100,000	
Instrume	ntation and Controls (Lift Stations and Misc. WWTF)					\$	100,000	
		·	Subtotal Co	onstru	ction Items	\$	3,232,383	
Contracto	or's OH&P and General Conditions	·				\$	484,857	
Total Cor	struction Costs					\$	3,717,240	
NON-CONSTRUCTION ITEMS								
Contingency (20%)						\$	744,000	
Basic Services - Preliminary Engineering Report							21,500	
Basic Services - Engineering, Permitting, and Bidding (Includes Re-Design of Existing Building Electrical, HVAC, Structural)							298,000	
Basic Services - Survey and Geotechnical						\$	25,000	
Basic Services - Environmental						\$	20,000	
Basic Services - Construction							185,862	
Resident Project Representative (RPR) - Assumes 12 months construction, meals, lodging, 10-hour work day, 5-days/week							342,792	
Owner Expense - Legal - General & Bond Counsel						\$	100,000	
Owner Ex	pense - Interim Financing Interest (12 Months, 4% Interest Rate)					\$	203,300	
			Total Non-0	Constr	uction Cost	\$	1,940,454	
			1	Total F	roject Cost	\$	5,657,694	



Table 3: Alternative III - Rehab Existing AIWWTF - Updated O&M Cost

Operations/Maintenance Items (Taken from Adopted 2022 Budget)	Existing O&M Cost		Estimated Change in O&M Cost		Proposed O&M Cost		20-	Year Present Value
Operations (Assumes 1/2 of Operations Expenses is Sewer)	\$	297,950	\$	40,000	\$	337,950	\$	7,127,242
Biosolids Removal and Disposal	\$	-	\$	22,500	\$	22,500	\$	474,517
Repairs and Maintenance Sewer	\$	1,500	\$	-	\$	1,500	\$	31,634
Repairs and Maintenance Aspen TP	\$	25,000	\$	22,500	\$	47,500	\$	1,001,758
Repairs and Maintenance Lift Stations	\$	20,000	\$	-	\$	20,000	\$	421,793
Repairs and Maintenance Office (Assumes 1/2 budgeted is sewer)	\$	2,350	\$	-	\$	2,350	\$	49,561
Repair and Maintenance SCADA (Assumes 1/2 budgeted is sewer)	\$	1,500	\$	-	\$	1,500	\$	31,634
Wastewater Treatment Chemicals	\$	20,000	\$	11,000	\$	31,000	\$	653,779
Line Extension Review Expense	\$	-	\$	-	\$	-	\$	-
Utilities - Aspen WTP	\$	21,000	\$	15,000	\$	36,000	\$	759,227
Utilities - Aspen WTP Propane	\$	2,000	\$	-	\$	2,000	\$	42,179
Utilities - Wagon Wheel LS	\$	2,000	\$	-	\$	2,000	\$	42,179
Utilities - MHE Lift Station	\$	3,500	\$	-	\$	3,500	\$	73,814
Utilities - Stables Lift Station	\$	1,800	\$	-	\$	1,800	\$	37,961
Utilities - Shop, Office, Yard (Assumes 1/2 budgeted is sewer)	\$	2,500	\$	-	\$	2,500	\$	52,724
Utilities - Shop, Office, Yard Propane (Assumes 1/2 budgeted is sewer)	\$	1,000	\$	-	\$	1,000	\$	21,090
Utilities - Office/Cell Phones (Assumes 1/2 budgeted is sewer)	\$	4,000	\$	-	\$	4,000	\$	84,359
Utilities - Trash and Recycling (Assumes 1/2 budgeted is sewer)	\$	1,250	\$	-	\$	1,250	\$	26,362
Payroll (Assumes 1/2 budgeted is sewer)	\$	207,872	\$	-	\$	207,872	\$	4,383,944
Total Annual Operations and Maintenance Costs	\$	615,222	\$	111,000	\$	726,222	\$	15,315,756

3.2 REPLACEMENT OF EXISTING WWTP SECONDARY TREATMENT SYSTEM AND CONSTRUCTION OF NEW STRUCTURES AND EQUIPMENT (PER ALTERNATIVE IV)

Alternative IV — "Replacement of Existing WWTP Secondary Treatment System and Constriction of New Structures and Equipment" is described in detail in the PER, titled "New Sequencing Batch Reactor (SBR) AlWWTF. In summary, the alternative includes the decommissioning of the existing AlWWTF and the complete replacement of the AlWWTF with a sequencing batch reactor (SBR) plant and all associated processes. This alternative would include the construction/installation of the following items:

- 1. SBR system (basins, valves, diffusers, blowers, controls)
- 2. UV disinfection
- 3. Effluent flume and flow meter
- 4. Building (lab/office, restroom, blowers, disinfection)

To modify this alternative to reflect no change to the hydraulic or organic loading limits, the following modifications to the cost estimate have been made:

- Reduction to quantities and unit costs of proposed equipment related to the SBR system (which would be affected by reduction to permitted hydraulic and organic limits) including:
 - o Excavation
 - o Concrete
 - Secondary Treatment Building
 - o Secondary Treatment Equipment
 - o Tank Handrails, Hatches, and Grating
- Reduction in soft costs to reflect change to construction scope
- Reduction to operations & maintenance costs to reflect decreased system size



Table 4 presents the revised construction cost estimate for Alternative IV – Replacement of Existing WWTP Secondary Treatment System and Constriction of New Structures and Equipment without expansion. Table 5 presents the revised operations and maintenance costs for the same alternative.

Table 4: Alternative IV – Replacement of Existing AIWWTF – Updated Construction Cost

Item Description Lift 1 Emergency Generator & Automatic Transfer Switch (Lift Stations)	n Institute WWTF Upgrades	Quantity 3	EA CY CY LS SF LS LS LS LS	\$ \$ \$ \$ \$ \$	250,000 40 1,100 85,000 110 127,500 1,128,375	\$ \$ \$ \$ \$	750,000 78,124 1,901,832 85,000 448,800 127,500
Item Description Lift 1 Emergency Generator & Automatic Transfer Switch (Lift Stations: Aspe 1 Excavation 2 Basin (SBR, Aerobic Digestor) and Building Concrete 3 Demolition and Removal of Existing WWTP Basins and Building 4 Secondary Treatment Building (New PEMB) 5 Tank Handrails, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	Station Emergency Power i) In Institute WWTF Upgrades	3 1,953 1,729 1 1 4,080 1 1 1 1 1 1	CY CY LS SF LS LS LS LS	\$ \$ \$ \$ \$ \$	250,000 40 1,100 85,000 110 127,500	\$ \$ \$ \$	750,000 78,124 1,901,832 85,000 448,800
Lift 1 Emergency Generator & Automatic Transfer Switch (Lift Stations Aspe 1 Excavation 2 Basin (SBR, Aerobic Digestor) and Building Concrete 3 Demolition and Removal of Existing WWTP Basins and Building 4 Secondary Treatment Building (New PEMB) 5 Tank Handrails, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	s) en Institute WWTF Upgrades	3 1,953 1,729 1 1 4,080 1 1 1 1 1 1	CY CY LS SF LS LS LS LS	\$ \$ \$ \$ \$ \$	250,000 40 1,100 85,000 110 127,500	\$ \$ \$ \$	750,000 78,124 1,901,832 85,000 448,800
1 Emergency Generator & Automatic Transfer Switch (Lift Station: Aspe 1 Excavation 2 Basin (SBR, Aerobic Digestor) and Building Concrete 3 Demolition and Removal of Existing WWTP Basins and Building 4 Secondary Treatment Building (New PEMB) 5 Tank Handrails, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	s) en Institute WWTF Upgrades	1,953 1,729 1 4,080 1 1 1 1	CY	\$ \$ \$ \$ \$ \$	40 1,100 85,000 110 127,500	\$ \$ \$ \$	78,124 1,901,832 85,000 448,800
Aspet 1 Excavation 2 Basin (SBR, Aerobic Digestor) and Building Concrete 3 Demolition and Removal of Existing WWTP Basins and Building 4 Secondary Treatment Building (New PEMB) 5 Tank Handrails, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	n Institute WWTF Upgrades	1,953 1,729 1 4,080 1 1 1 1	CY	\$ \$ \$ \$ \$ \$	40 1,100 85,000 110 127,500	\$ \$ \$ \$	78,124 1,901,832 85,000 448,800
1 Excavation 2 Basin (SBR, Aerobic Digestor) and Building Concrete 3 Demolition and Removal of Existing WWTP Basins and Building 4 Secondary Treatment Building (New PEMB) 5 Tank Handrails, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)		1,953 1,729 1 4,080 1 1 1 1	CY LS SF LS LS LS LS LS	\$ \$ \$ \$ \$	1,100 85,000 110 127,500	\$ \$ \$ \$	1,901,832 85,000 448,800
2 Basin (SBR, Aerobic Digestor) and Building Concrete 3 Demolition and Removal of Existing WWTP Basins and Building 4 Secondary Treatment Building (New PEMB) 5 Tank Handralls, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	anter, Controls)	1,729 1 4,080 1 1 1 1	CY LS SF LS LS LS LS LS	\$ \$ \$ \$ \$	1,100 85,000 110 127,500	\$ \$ \$ \$	1,901,832 85,000 448,800
3 Demolition and Removal of Existing WWTP Basins and Building 4 Secondary Treatment Building (New PEMB) 5 Tank Handrails, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	anter, Controls)	1 4,080 1 1 1	LS SF LS LS LS LS LS	\$ \$ \$ \$ \$	85,000 110 127,500	\$	85,000 448,800
4 Secondary Treatment Building (New PEMB) 5 Tank Handrails, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	anter, Controls)	4,080 1 1 1 1	SF LS LS LS LS	\$ \$ \$ \$	110 127,500	\$	448,800
5 Tank Handrails, Hatches, and Grating 6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	anter, Controls)	1 1 1 1	LS LS LS	\$ \$	127,500	\$	
6 Secondary Treatment Equipment (Diffusers, Valves, Probes, Dec. 7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	anter, Controls)	1 1 1	LS LS	\$			127,500
7 Disinfection (UV) 8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)	anter, Controls)	1 1	LS LS	\$	1 1 2 2 2 7 5		
8 Process Piping and Valves 9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)		1	LS			\$	1,128,375
9 Yard Piping, Manholes, and Valves 10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)		_			292,500	\$	292,500
10 Emergency Generator & Automatic Transfer Switch (WWTF) 11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)		1		\$	185,000	\$	185,000
11 Decant Pumps (Aerated Digestor to Sludge Holding Pond)			LS	\$	95,000	\$	95,000
1 1 0 0 0 7		1	EA	\$	250,000	\$	250,000
12 Sludge Transfer Automated Pumps (Sludge Holding Pond to Sludge		2	EA	\$	45,000	\$	90,000
	ge Drying Bed)	2	EA	\$	95,000	\$	190,000
Subtotal Construction Item							5,622,131
Mobilization/Demobilization							
Erosion Control/Site Restoration							140,553
Traffic Control							56,221
Electrical (Including Updating Existing Secondary Treatment Building to Proper Codes)							449,770
Instrumentation and Controls (WWTF PLC & SCADA)							250,000
Instrumentation and Controls (Lift Stations and Misc. WWTF)							100,000
Subtotal Construction Item							6,899,783
Contractor's OH&P and General Conditions						\$	1,034,967
Total Construction Costs						\$	7,934,750
NC	N-CONSTRUCTION ITEMS						
Contingency (20%)						\$	1,587,000
Basic Services - Preliminary Engineering Report							21,500
Basic Services - Engineering, Permitting, and Bidding							397,000
Basic Services - Survey and Geotechnical							25,000
Basic Services - Environmental							20,000
Basic Services - Construction							396,738
Resident Project Representative (RPR) - Assumes 18 months construction, meals, lodging, 10-hour work day, 5-days/week							514,188
Owner Expense - Legal - General & Bond Counsel							100,000
Owner Expense - Interim Financing Interest (18 Months, 4% Interest Rate)						\$	644,100
o mer expense interest managements (10 months) 470 merest nate)			Total Non-	Const	ruction Cost	т .	3,705,526
					Project Cost		11,640,276



Table 5: Alternative IV - Replacement of Existing AIWWTF - Updated O&M Cost

Operations/Maintenance Items (Taken from Adopted 2022 Budget)	C	Existing O&M Cost		Estimated Change in O&M Cost		Proposed O&M Cost		Year Present Value
Operations (Assumes 1/2 of Operations Expenses is Sewer)	\$	297,950	\$	40,000	\$	337,950	\$	7,127,242
Biosolids Removal and Disposal	\$	-	\$	22,500	\$	22,500	\$	474,517
Repairs and Maintenance Sewer	\$	1,500	\$	-	\$	1,500	\$	31,634
Repairs and Maintenance Aspen TP	\$	25,000	\$	(25,000)	\$	-	\$	-
Repairs and Maintenance Lift Stations	\$	20,000	\$	-	\$	20,000	\$	421,793
Repairs and Maintenance Office (Assumes 1/2 budgeted is sewer)	\$	2,350	\$	-	\$	2,350	\$	49,561
Repair and Maintenance SCADA (Assumes 1/2 budgeted is sewer)	\$	1,500	\$	-	\$	1,500	\$	31,634
Wastewater Treatment Chemicals	\$	20,000	\$	5,500	\$	25,500	\$	537,786
Line Extension Review Expense	\$	-	\$	-	\$	-	\$	-
Utilities - Aspen WTP	\$	21,000	\$	6,000	\$	27,000	\$	569,420
Utilities - Aspen WTP Propane	\$	2,000	\$	-	\$	2,000	\$	42,179
Utilities - Wagon Wheel LS	\$	2,000	\$	-	\$	2,000	\$	42,179
Utilities - MHE Lift Station	\$	3,500	\$	-	\$	3,500	\$	73,814
Utilities - Stables Lift Station	\$	1,800	\$	-	\$	1,800	\$	37,961
Utilities - Shop, Office, Yard (Assumes 1/2 budgeted is sewer)	\$	2,500	\$	-	\$	2,500	\$	52,724
Utilities - Shop, Office, Yard Propane (Assumes 1/2 budgeted is sewer)	\$	1,000	\$	-	\$	1,000	\$	21,090
Utilities - Office/Cell Phones (Assumes 1/2 budgeted is sewer)	\$	4,000	\$	-	\$	4,000	\$	84,359
Utilities - Trash and Recycling (Assumes 1/2 budgeted is sewer)	\$	1,250	\$	-	\$	1,250	\$	26,362
Payroll (Assumes 1/2 budgeted is sewer)	\$	207,872	\$	-	\$	207,872	\$	4,383,944
Total Annual Operations and Maintenance Costs	\$	615,222	\$	49,000	\$	664,222	\$	14,008,199

3.3 COST COMPARISON TO PER COSTS

Table 6 summarizes the costs from the PER that reflected the proposed increase to the hydraulic and organic loading versus the modified costs presented in this memo that reflect improvements if the existing hydraulic and organic loading are not modified. These costs include the capital cost as well as the 20-year present value of the change to operations and maintenance.

Table 6: Cost Comparison of PER Costs (Expansion) and Modified Costs (No Expansion)

	Cost Variable	Alternative III - Improvements to Existing AIWWTP	Alternative IV - New Sequencing Batch Reactor (SBR)
ision Cost)	Total Project Cost	\$ 5,657,694	\$ 11,640,276
No Expansion (Updated Cost	20-Year Present Value of Change to O&M Cost	\$ 2,340,949	\$ 1,033,392
No (Upc	20-Year Present Worth of Project Costs	\$ 7,998,643	\$ 12,673,668
sion t)	Total Project Cost	\$ 11,722,239	\$ 12,841,177
With Expansion (PER Cost)	20-Year Present Value of Change to O&M Cost	\$ 2,583,480	\$ 1,202,109
With (P	20-Year Present Worth of Project Costs	\$ 14,305,720	\$ 14,043,286

Table 7 estimates the total yearly project cost for each alternative and scenario described. The yearly project cost estimates assume a 50% USDA grant, and a 40-year loan at an interest rate of 3%.



Table 7: Total Yearly Project Cost

Scenario	To	otal Project		SDA Grant	-	otal Loan	Δ	nnual Loan	Α	dditional		Reserve	1	otal Yearly
Scenario		Cost	J	SDA Grant	•	Otal Loan		Payment	An	nual O&M	Red	quirements	P	roject Cost
Alt 3 - No Expansion	\$	5,657,694	\$	2,828,847	\$	2,828,847	\$	122,383	\$	111,000	\$	12,238	\$	245,621
Alt 4 - No Expansion	\$	11,640,276	\$	5,820,138	\$	5,820,138	\$	251,793	\$	49,000	\$	25,179	\$	325,972
Alt 3 - With Expansion	\$	11,722,239	\$	5,861,120	\$	5,861,120	\$	253,566	\$	122,500	\$	25,357	\$	401,423
Alt 4 - With Expansion	\$	12,841,177	\$	6,420,589	\$	6,420,589	\$	277,770	\$	57,000	\$	27,777	\$	362,547
Note: Annual Loan Payment assu	mes	3% interest ra	te a	nd 40 year loa	n. A	ssumes 50% l	JSD	A grant.				•		

Table 8 calculates the proposed monthly user base rate to support the project for each alternative and scenario described.

Table 8: Proposed Monthly User Base Rate

Scenario	tal Yearly oject Cost	kisting Base onthly User Rate	No. of Services	M	ncrease to onthly User Base Rate	ı	Existing onthly User Fee to be Applied to Project Payment	Mo	Proposed onthly User Base Rate
Alt 3 - No Expansion	\$ 245,621	\$ 40.73	802	\$	25.52	\$	3.70	\$	62.55
Alt 4 - No Expansion	\$ 325,972	\$ 40.73	802	\$	33.87	\$	3.70	\$	70.90
Alt 3 - With Expansion	\$ 401,423	\$ 40.73	802	\$	41.71	\$	3.70	\$	78.74
Alt 4 - With Expansion	\$ 362,547	\$ 40.73	802	\$	37.67	\$	3.70	\$	74.70

4 RECOMMENDATIONS

As this analysis shows, new data acquired during the 2023 calendar year, particularly influent BOD loading (lb/day) indicate that a hydraulic or organic expansion of the facility is not required. This updated analysis shows that with the falling BOD loading, and the elimination of expansion consideration, upgrade to the existing facility (without expansion) is an economically feasible alternative. There are several items to keep in mind when considering upgrade of the existing facility:

1. The original project envisioned the upgrade and expansion of the existing facility. The expansion was due to BOD loading (lb/day) data indicating that an expansion was necessary. The upgrade to the facility was meant to replace outdated equipment and replace the existing processes with more technologically advanced processes to meet future discharge limitations. These future discharge limitations will likely be enacted in the district's next discharge permit issuance.

The district is currently in the process of applying for a new discharge permit, as the current permit expires in October of 2024. CDPHE will have up to five (5) years after the termination of the existing permit to issue a new permit. There are no limits in the existing permit that require a facility upgrade. However, it is likely the new permit will contain TN, TIN, and TP limits that will necessitate a facility upgrade.

Therefore, it is possible for the district to wait, and pause planning for the wastewater treatment plant project until the new discharge permit is issued, pick up the project at that time, working within the time limitations allowed by that permit.



2. The district can continue to plan, design, and fund the proposed project, either through rehabilitation of the existing wastewater treatment facility, or through replacement of the facility (without expansion). If rehabilitation of the existing facility is initially desired, Element and BGWSD staff recommend a structural engineer be brought on to complete a structural analysis of the existing concrete basins and building and determine their structural integrity. This would either eliminate or highlight the potential inherent risks working within the existing structure described in the previously issued PER. Element has reached out to our structural team to prepare a proposal for district staff and board consideration.

Based on these two items, a further discussion with the district board is recommended. If the board chooses, a structural analysis of the existing WWTP may be conducted.

				Inf	luent																		
	Flo	ow			OD		Т	SS	В	OD	BOD % Removal	Т	rss	TSS % Removal	E. (coli	1	pH	Amn	nonia	Oil & Grease	Chlor	rine TR
	Mo	GD	me	g/L	lbs/	'day	mg	g/L	m	g/L	%	m	g/L	%	#/10	00 mL		su	me	g/L	mg/L	mg/L	mg/L
	30-DA	DM	30-DA	7-DA	30-DA	7-DA	30-DA	7-DA	30-DA	7-DA	MO AV MN	30-DA	7-DA	MO AV MN	30-DA	7-DA	Min	Max	30-DA	DM	DM	30- DA	IM
	0.15				300																		
Permit Limit	0.14				285				30	45	85	30	45	85	64	128	6.5	9	See Permit	See Permit	10	0.011	0.019
120	0.12	0.002	270	270	240	202	542	543	0.0	0.0	07.0	22	22	05.6		-	6.0	7.0	2.24	0.04			
Jan-20 Feb-20	0.074 0.075	0.092 0.084	370 452	370 452	302 283	302 283	512 656	512 656	8.0 7.1	8.0 7.1	97.8 98.4	22 14	22 14	95.6 97.8	2	5 2	6.8	7.2 7.1	0.04	0.04 0.74	0		4
Mar-20	0.075	0.084	309	309	178	178	446	446	3.5	3.5	98.9	4	4	99.1	2	2	7.0	7.1	0.38	0.74	0	0	0
Apr-20	0.069	0.079	332	332	191	191	848	848	8.3	8.3	97.5	17	17	98.0	5	5	7.1	7.1	1.17	1.17	0	0	0
May-20	0.070	0.070	396	396	211	211	540	540	8.0	8.0	98.0	9	9	98.3	72	72	7.1	7.4	11.30	29.60	0	0	0
Jun-20	0.071	0.075	364	364	212	212	693	693	5.3	5.3	98.5	6	6	99.1	7	7	7.4	7.2	1.24	1.24	0	0	0
Jul-20	0.072	0.086	432	432	238	238	656	656	12.5	12.5	97.1	29	29	95.7	58	58	7.2	7.3	1.42	1.42	0	0	0
Aug-20	0.080	0.073	104	104	63	63	330	330	3.5	3.5	96.6	6	6	98.3	12	12	6.9	7.3	0.47	0.47	0	0	0
Sep-20	0.074	0.081	286	286	172	172	286	286	2.6	2.6	99.1	16	16	96.4	7	7	6.7	7.8	0.15	0.15	0	0	0
Oct-20	0.075	0.080	207	207	121	121	198	198	3.5	3.5	98.3	1	1	99.4	10	10	7.2	7.4	0.60	0.60	0	0	0
Nov-20	0.071	0.081	216	216	130	130	546	546	3.8	3.9	98.2	12	12	97.8	3	3	7.2	7.6	0.17	0.17	0	0	0
Dec-20	0.079	0.084	290	338	174	220	497	648	13.5	17.8	95.4	19	20	96.1	20	20	7.2	7.4	0.11	0.11	0	0	0
Jan-21	0.082	0.097	295	327	202	205	363	434	19.8	48.8	93.0	13	16	96.3	2	2	6.9	6.9	2.15	2.15	0	0	0
Feb-21	0.074	0.090	382	375	156	225	382	982	17.0	24.9	94.3	25	30	88.0	17	17	6.8	6.9	2.20	2.31	0	0	0
Mar-21	0.066	0.103	289	367	159	193	616	955	6.9	14.6	97.6	15	41	96.2	9	15	6.8	7.2	1.17	1.72	0	0	0
Apr-21	0.067	0.076	179	198	97	111	262	300	5.3	6.1	97.0	11	11	95.9	12	12	7.1	7.7	1.90	2.62	0	0	0
May-21	0.069	0.076	332	468	186	285	418	697	11.3	14.9	96.5	28	40	93.1	12	12	6.9	7.3	1.40	2.20	0	0	0
Jun-21	0.091	0.110	326	628	231	456	564	1240	8.1	12.6	93.3	23	41	89.0	2	2	6.4	7.5	0.09	1.70	0	0	0
Jul-21	0.083	0.101	380	393	232	246	430	506	6.6	11.0	98.2	21	32	95.1	5	5	6.9	7.4	0.22	0.60	0	0	0
Aug-21	0.090	0.103	272	333	200	233	626	1208	6.4	12.3	97.8	13	46	97.2	3	3	6.7	7.4	0.05	0.07	0	0	0
Sep-21	0.091	0.100	279	382	193	210	466	604	12.7	31.2	95.0	11	14	97.5	2	2	7.0	7.4	0.06	0.12	0	0	0
Oct-21	0.099	0.106	199	199	164	164	401	460	5.0	5.0	97.5	25	30	93.5	3	3	6.9	7.3	0.01	0.02	0	0	0
Nov-21	0.102	0.114	238	317	183	256	324	460	5.6	6.2	97.6	18	21	93.9	17	17	7.0	7.4	0.00	0.01	0	0	0
Dec-21	0.065	0.082	284	395	152	211	315	485	8.8	14.4	96.9	21	26	93.0	37	37	7.0	7.8	0.00	0.00	0	0	0
Jan-22	0.065	0.076	465	676	238	361	467	740	8.8	14.0	97.8	22	27	95.3	13	13	7.2	7.8	0.00	0.00	0	0	0
Feb-22	0.064	0.073	422	422	218	218	386	497	4.8	4.8	98.9	10	12	97.0	8	8	7.1	7.5	0.01	0.27	0	0	0
Mar-22	0.063 0.064	0.077 0.091	486 438	576 530	238 198	302 283	671 558	965	3.2 7.8	4.8	99.3 98.2	6 16	8	99.1 97.1	3	3 10	6.5 6.7	7.3 7.2	0.02	0.07 0.02	0	0	0
Apr-22	0.064	0.091	513	635		318	1202	729 3460	2.5	8.3 2.9	99.5	6	21	99.3	10 5		6.9	7.2	0.02	0.02	0	0	0
May-22 Jun-22	0.067	0.079	400	543	273 198	293	401	716	4.8	13.5	98.9	12	8 31	99.3	2	5	6.8	7.4	0.05	0.09	0	0	0
Jul-22	0.069	0.080	282	524	164	332	180	222	5.9	11.3	97.0	16	26	90.7	3	3	7.2	7.4	0.28	0.66	0	0	0
Aug-22	0.067	0.077	307	363	172	194	349	434	34.0	43.0	89.4	13	19	96.1	2	2	7.2	7.4	0.10	0.34	0	0	0
Sep-22	0.069	0.078	233	273	129	148	238	328	25.0	40.0	88.5	12	17	94.4	8	8	7.0	7.3	0.45	1.49	0	0	0
Oct-22	0.066	0.079	385	529	202	260	450	550	10.2	15.9	96.9	11	15	97.4	7	7	7.1	7.3	0.37	1.43	0	0	0
Nov-22	0.064	0.085	343	382	188	212	359	447	10.0	19.1	96.8	11	14	96.6	2	2	6.9	7.2	0.86	1.58	0	0	0
Dec-22	0.064	0.077	248	362	130	193	217	308	24.9	60.6	87.3	40	107	76.0	3	3	6.7	7.1	0.09	0.14	0	0	0
Jan-23	0.063	0.078	262	308	139	157	313	392	26.8	75.0	88.7	29	50	89.6	3	3	7.0	7.3	1.10	3.38	0	0	0
Feb-23	0.068	0.075	283	329	156	178	294	332	12.2	23.3	96.0	11	20	96.0	17	17	7.1	7.3	2.60	2.65	0	0	0
Mar-23	0.062	0.069	282	340	145	168	399	520	19.8	19.8	88.6	21	32	94.2	12	12	7.1	7.4	2.19	2.39	0	0	0
Apr-23	0.064	0.075	208	245	105	118	222	298	18.2	24.5	88.3	18	20	92.0	10	10	7.0	7.2	2.14	2.41	0	0	0
May-23	0.066	0.077	240	514	125	253	254	644	24.7	35.5	87.7	16	27	90.0	8	8	7.0	7.3	1.67	2.45	0	0	0
Jun-23	0.069	0.082	255	369	148	212	318	512	11.5	32.0	96.3	17	51	95.7	15	15	6.8	7.1	0.80	1.00	0	0	0
Jul-23	0.069	0.077	318	385	132	141	283	294	14.0	22.5	94.6	16	29	94.3	7	7	6.8	7.1	0.10	0.14	0	0	0
Aug-23	0.066	0.091	236	287	127	156	274	314	15.0	29.0	93.6	19	27	93.0	8	8	6.9	7.4	0.80	1.95	0	0	0
Sep-23	0.069	0.076	156	244	88	138	342	395	7.0	7.0	94.7	12	21	96.3	2	2	7.0	7.2	0.72	1.26	0	0	0
Oct-23	0.063	0.070	174	205	93	104	220	273	7.5	12.0	95.6	11	16	95.1	3	3	6.8	7.0	2.10	6.44	0	0	0
Nov-23	0.062	0.069	236	405	119	193	335	465	11.2	22.5	95.8	17	27	94.2	3	3	6.9	7.1	0.81	2.12	0	0	0
Dec-23	0.063	0.078	248	292	129	146	358	417	20.0	30.0	92.0	26	46	92.7	7	7	6.5	7.1	1.83	7.94	0	0	0
Average	0.071	0.083	305	373	173	212	426	603	10.9	17.9	95.6	16	24	95.0	10	10	6.9	7.3	0.96	1.88	0	0	0
Maximum Source: Baca Gran	0.102	0.114	513	676	302	456	1202	3460	34.0	75.0	99.5	40	107	99.4	72	72	7.4	7.8	11.30	29.60	0	0	0

Source: Baca Grande Water & Sanitation District Discharge Monitoring Reports. Permit Number CO-0046914.

Exceedance of Permitted Limit

Exceedance of 95% Permitted Limit (Influent Flow and Organic Loading Only)

Exceedance of 80% Permitted Limit (Influent Flow and Organic Loading Only)



District Manager Report – March 20, 2024

Saguache County Grant - Water Loss Prevention Project (Capital Project)

- ➤ Bids were due on 02/19/2024 Present to BoD for selection
- > Bids were well over the budgeted amount
 - Staff and Engineers are in the process of determining the best alternatives to complete the project.

United States Fish and Wildlife Service (USFWS) - Water lease negotiations

- ➤ USFWS reply was received on 12/20/2023
 - Need to come to agreement on pricing, handling of administration costs, process for working together during drought conditions, and compensation for retiring some of the water rights.
- Next step In person meeting with USFSW
 - Scheduled for March 14th in Alamosa, CO
- ➤ Met with eight representatives from USFWS to negotiate the lease agreement
 - o Progress was made, but will need to discuss some issues further, including pricing.
 - o Counsel will be drafting the new agreement

<u>Town of Crestone (ToC) – Sewer Service Negotiations</u>

- Received response from ToC on 02/07/2024 Will be discussing today and responding ASAP
 - o Tap Fees
- The District did not receive a response in relation to the Discharge Permit.
 - Will need to follow-up with the next attorney representing the Town.

Grant Opportunities

- Bureau of Reclamation Planning and Project Design Grant
 - o To help with planning the next phases of water loss prevention
 - Possibly help with D&E of Motel Well tie in
 - Up to \$400,000 Will apply by 05/2024

Personnel

- ➤ COVID No cases to report
- Interviewed several candidates for the Operations and Administration Positions
 - One Operations position was filled
- Working on drafting job descriptions and corresponding salary ranges

Cottonwood Tank

- Kundalini Fire Management has offered the District free fire mitigation at the Cottonwood Tank property
 - Focused on removing dead and fallen trees
 - o Would like to burn the wood when conditions allow after a snow storm
 - Insurance has been received



Aspen Institute Wastewater Treatment Facility Permit Exceedances Review 2018-2023

The Water Quality Control Division (The Division) of the Colorado Department of Public Health and Environment (CDPHE) is responsible for issuing Colorado Discharge Permit System (CDPS) permits for all discharges in the State of Colorado. Permit limits are determined by many environmental factors including: characteristics of the receiving waters, downstream users, quantity of pollutants and treatment facility type. Permits for domestic wastewater treatment plant generally base pollutant limits on 30-day averages and 7-day maximums.

Compliance with CDPS Permits is primarily monitored through self-reporting from the discharger on the Discharge Monitoring Report (DMR). DMR's are require to be electronically submitted at the frequency specified on the permit. When a discharger exceeds a limit in the CDPS permit it is reported The Division through the DMR. Enforcement responses range from a compliance advisory letter to formal enforcement which can carry significant civil monetary penalties. In general, the Division differentiates between exceedances and violations that are considered Significant Non-Compliance (SNC) and those that are not. Exceedances that are not considered SNC receive an auto generated compliance advisory letter. Violations that are considered SNC are primarily confined to non-compliance in repeated monitoring periods for the same pollutants. The enforcement response for SNC compliance varies greatly depending on the severity of the violation but can result in civil penalties of up to \$61,427 per day.

Since January, 2018 there have been 34 instances where reported figures exceeded permit limits.

- 3 for BOD (biological oxygen demand) lbs. per day influent flow
- The effluent permit exceedances are as follows:
 - 8 for BOD mg/L exceeding the 30 and 7 day limits
 - 8 for TSS (Total Suspended Solids) mg/L exceeding 30 and 7 day limits
 - 2 for TSS % removal
 - o 3 for E. coli
 - o 1 for pH
 - o 1 for ammonia
 - 8 for chlorine (Chlorine is not currently used or tested for)
- 22 (65%) of the 34 policy exceedances occurred prior to January, 2021
 - Of the 12 policy exceedances that have occurred since January, 2021, 6 happened in the months of December, 2022 and January 2023

While there have been a number CDPS Permit exceedances over the past 5 years none have been considered SNC. The Water Quality Control Division considers these exceedances to be infrequent or isolated events that do not warrant enforcement. Operations staff has made great strides over the past several years to improve the operation of the AIWWTF. These improvements include, but are not limited to:

• Increased water quality monitoring frequencies to obtain more accurate and consistent data (permit requires monthly testing, The District has been testing weekly)



- Updated Standard Operating Procedures (SOPs) for the laboratory that align with industry standard methods
- Implementation Quality Assurance/Quality Control measures to insure the accuracy of our data
- Implementation of digitized data collection for faster and more reliable data reporting
- Implementation and installation of online water quality monitoring equipment to help operators make more informed process control changes.

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Nov-23 0.062 0.069 236 405 119 193 335 465 11.2 22.5 96 17 27 94 3 3 3 6.9 7.1 0.8 2.1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sep-23	0.069	0.076	156	244	88	138	342	395	7.0	7.0				96	2	2	7.0		0.7	1.3	0	0	0
Dec-23 0.063 0.078 248 292 129 146 358 417 20.0 30.0 92 26 46 93 7 7 6.5 7.1 1.8 7.9 0 0 0 Average 0.071 0.103 325 364 203 236 453 640 10.6 15.7 96 16 23 96 17 52 7.0 7.4 0.7 1.2 0 0.004 0.008 Maximum 0.102 0.990 513 676 392 456 1202 3460 40 75 100 55 185 99 158 1986 7.6 8.4 11.3 29.6 0 0.102 0.240 ource: Baca Grande Water & Sanitation District Discharge Monitoring Reports. Permit Number CO-0046914. 453 450 40 75 100 55 185 99 158 198 7.6 8.4 11.3 29.6 0 0.102																3	3					0	0	0
Average 0.071 0.103 325 364 203 236 453 640 10.6 15.7 96 16 23 96 17 52 7.0 7.4 0.7 1.2 0 0.004 0.008 Maximum 0.102 0.990 513 676 392 456 1202 3460 40 75 100 55 185 99 158 1986 7.6 8.4 11.3 29.6 0 0.102 0.240 ource: Baca Grande Water & Sanitation District Discharge Monitoring Reports. Permit Number CO-0046914.																7	7					0	0	0
Maximum 0.102 0.990 513 676 392 456 1202 3460 40 75 100 55 185 99 158 1986 7.6 8.4 11.3 29.6 0 0.102 0.240 ource: Baca Grande Water & Sanitation District Discharge Wonitoring Reports. Permit Number CO-0046914.																,	52					0	0.004	U
	Maximum	0.102	0.990	513	676	392					75	100	55			158					29.6	0	0.102	0.240
				arge Monitoring Rep	oorts. Permit Numb	er CO-0046914.																		

Exceedance of Permitted Limit
Exceedance of 95% Permitted Limit (Influent Flow and Organic Loading Only)
Exceedance of 80% Permitted Limit (Influent Flow and Organic Loading Only)

Administrative Monthly Report

AOS Billing: AOS was successfully billed and AOS billing went out to customers on February 01, 2024. Due date – June 30th, 2024. Currently the office is receiving a high volume of calls from first time AOS customers.

SDA Workshops: Annual Reginal workshops are heading our way. June 10th SDA workshop will take place in Salida. Board members are encouraged to attend. For more information the flyer is attached to the end of the report.

Caselle: Caselle Billing Software was updates to the latest version.

Water Main Breaks and Customer Notices: During the three water main breaks customers were notified via the Districts website and was updated with progress from the operations team. During the outage a few customers came to the office to fill water containers.

Saguache County Tax Sale Grant application: BOCC will review applications in their work session in March. No further updates at this time.

Personnel: On boarding was completed for the new operations team member and separation process and documents were completed for two outgoing staff members. We have received a few applicants and are in the process of interviewing the applicants for operation and administrative positions.

We are hiring: BGWSD seeking a full time Administrative Utility Billing Assistant. The job posting was posted online on District website and job flyers were posted though out the District and County and also with Alamosa job force center.

Website verification project: Website tap status and AOS verification project continue to be in progress. Admin staff are working to ensure the information displayed on the website remains accurate and up-to-date. Meanwhile we highly recommend that our customers contact our office to verify the information found on the website.

Billing Message: Come join our team! Baca Grande Water and Sanitation District is currently accepting applications for full-time administrative and operational positions. The District offers an excellent benefits package including, Paid Time Off, Health and Life insurance with options for Dental and Vision, PERA retirement program and training opportunities. For more details, visit our Employment Opportunities web page at www.bacawater.com.

File Organization & Archiving project: files organization, scanning and archiving project is ongoing.

UTILITY BILLING ACTIVITY FOR THE MONTH OF FEBRUARY (BILLED IN MARCH)

Cus	stomer Utility Billing	
Billing Category	Number of Accts	Amount Billed
Usage Customers Billed - SEWER	822	\$39,684.90
Usage Customers Billed - WATER	844	\$46,876.72
ON/OFF Service	5	\$125.00
LATE FEE	58	\$1,120.00
TRANSFER	13	\$3,850.00
CONSOLIDATIONS	0	\$.00
EQR	27	\$785.75
NSF FEE	0	\$.00
TAP FEE	0	\$.00
WATER & SEWER HOOK UP	1	\$3,000.00

FEBRUARY - XPRESS BILL PAY TRANSACTION ACTIVITY

Product / Service Description	Qty	Unit Price	Line Total
EFT Web Transactions	275	\$0.64	\$176.00
Credit/Debit Card Web Transactions	405	\$0.49	\$198.45
Online Banking - Bank Bill Pay Transactions	24	\$0.25	\$6.00
Lock Box Service Transactions	282	\$0.58	\$163.56
Toll Free Operator Assisted Transactions	6	\$1.25	\$7.50
Toll Free IVR Transactions	11	\$1.25	\$13.75
Support, Maintenance, Hosting - Fee	1	\$100.00	\$100.00

Town of Crestone Sewer 2024

Town of Crestone Sewer Billing - 2024

				Average				
	Monthly	Monthly	Flow	Daily	Monthly	BOD		
Date	Total	Flow	Charges	BOD	BOD	Charges	Paid	Balance Due
								02/28/2024-
January	418,898	3,309,294.20	\$ 3,309.29	37	1221	\$ 1,210.01	Check #13917	\$4,519.31
								03/31/2024-
February	379,458	2,997,718.20	\$2,997.72	38	1140	\$1,129.74		\$4
March								
April								
May								
June								
July								
August								
September								
October								
November	<u> </u>							
December								
2023 Totals								

New Rate 10/2022

Rate per 1,000 Gallons of Flow: \$7.900 / 1,000

gallons

Rate per Pound of BOD: \$0.991 /

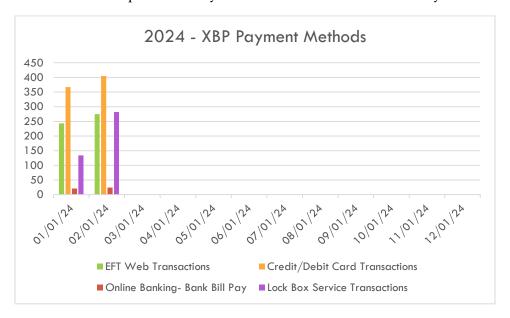
pounds BOD

February - 2024- Property Sales: 1- Homes, 8- Lots



February - 2024 – Other Sales Statistic Including Name Changes Only
Prepared by Jennifer Jenkins:

Туре	Vacant Lot	House	Total Charges
Quit Claim Deed	2	2	\$700.00
Warranty Deed	1	1	\$0.00
Treasurer's Deed	0	0	\$0.00
Bargain & Sale Deed	0	1	\$0.00
Contract for Deed	0	0	\$0.00
			Total: \$700.00



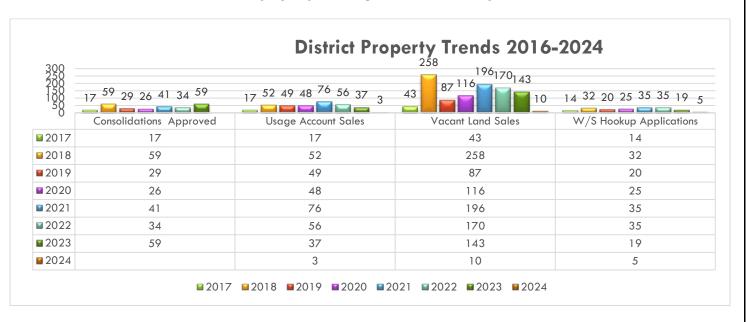
2024 - Xpress Bill Pay Customers Transactions Activity

2024 - Water and Sewer Hook up Applications

1 - Application (s) received in February. $5\,$ – Total application (s) received in $2024\,$

	65	5	5 4 4	6	65	7		8			44	
	1 1010	1130232	⁵ 3 ⁴ ⁴ 2	1 11 01	23 3 2	33 ⁴ 2 ₁ 1	2133221	3 ₂ 3 ₁ 2 2	1302011	2 ₁₁ 22 ₁ ₀	120244	00 010
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
■ 2024 = 5 applications	4	1										
■ 2023=19 applications	1	1	2	1	2	3	2	3	1	2	1	0
■ 2022=35 applications	6	3	5	6	3	3	1	2	3	1	2	0
■2021=35 applications	5	5	3	1	6	4	3	3	0	1	0	3
■ 2020=25 applications	1	0	4	1	5	2	3	1	2	2	2	2
■ 2019 = 20 applications	0	2	1	3	3	1	2	2	0	2	4	0
■ 2018= 32 applications	1	3	4	0	0	7	2	8	1	1	4	1
■ 2017= 14 applications	0	2	2	1	2	1	1	2	1	0	2	0

2016-2024 PROPERTY TRENDS



Mark Your Calendars and Plan to Join Us...

The SDA Annual Regional Workshops are Headed Your Way in June with a New Format and Information You Need!

his year we are changing the format a bit to accommodate your needs! We are finalizing all of the details, but we are once again hitting the road during the month of June to bring you the ever-popular SDA Annual Regional Workshops!

These lively and educational trainings apply to all types of districts and are sure to provide a wealth of valuable information for your district. Whether you are a Board member or district employee, a seasoned professional or brand new to your position, we will have something for everyone.

We will cover a wide variety of important topics such as minutes, meeting formats, open meetings, conflicts of interests, public records, CSD Pool Programs to help your district be safer, and of course our 2024 legislative update, just to name a few. On top of all this, every attendee will receive a copy of the 2024 SDA Board Member Manual.

This year we will be visiting 10 locations around the state, and each workshop will run for approximately half a day in the morning.

We have many more details to come; watch your emails and the SDA website at www.sdaco.org for all the information as it becomes available. We will see you there!

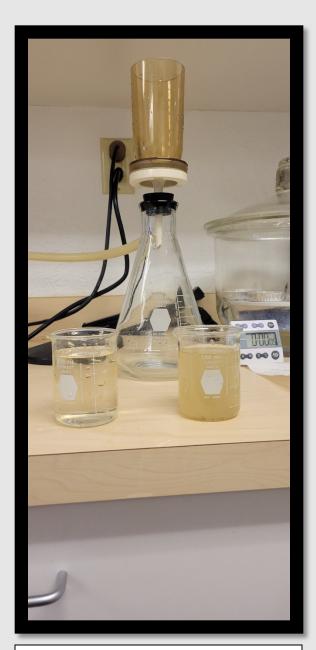
whether you are
a Board member or
a Board member or
district employee, a



- Salida Monday, June 10 (Morning)
- Clifton
 Tuesday, June 11 (Morning)
- Wednesday, June 12 (Morning)
- Granby
 Thursday, June 13 (Morning)
- Friday, June 14 (Morning)
- Fountain
 Monday, June 17 (Morning)
- Parker
 Tuesday, June 18 (Morning)
- 8 Frederick Thursday, June 20 (Morning)
- 9 **Durango** Friday, **June 21** (Morning)
- Evergreen
 Monday, June 24 (Morning)

Baca Grande Water and Sanitation District Monthly Operations Report

March 20th, 2024



Sample at the Aspen Wastewater Treatment plant (Effluent Left, Influent right)



Crack in the water main on Baca Grant Way

Facilities and Staff Updates

In Service

Repaired last month

Out of Service

				W	/ater Fa	cilities					
We	II 18	Moor Tran Stat		Tran	eview isfer tion	Tran	n Tree nsfer tion	Pine Boo Stat	ster	Shu Boo Stat	ster
Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2

			Wa	astewate	er Facilit	ies			
Aspen	WWTP	Stable Stat	es Lift tion	•	Vheel Lift tion	MHE Lift	t Station	Dharma Lift St	
Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump
1	2	1	2	1	2	1	2	1	2

		Service Vehicles		
Truck 1	Truck 2	Truck 3	Truck 4	Truck 5

Equipment				
Vactor Truck	Dump Truck	Backhoe	Skid steer	Excavator

> Vactor

o Repairs have been completed and the truck is back on site

Accidents

o Happy to report no accidents in February!!

Operations Updates

Aspen Wastewater Treatment Plant

 I am currently working with Element engineering to renew the discharge permit which expires in October 2024.

> Training and Education

- Very Excited to announce that Mark Elliott Has completed his CDL training school and now has a Valid Class B CDL license!
- This accomplishment took a lot of effort and tenacity and I am very proud of his efforts
- All other operators are studying to increase their water and wastewater certification levels

Water Main Break

- o 2/27/24 Water main break on Camino Real
- o 2/3/24 Water main break on Spanish Creek Road
- o 2/3/24 Water main break Baca Grant Way
- All these breaks happed in a one week time span. I would like to take a moment to acknowledge the staff for their dedication and hard work.

➤ New Lead and Cooper Rule Revision

- Continuing to build a spreadsheet to determine the age of residences in the District.
- In the process of using historical tap data to reduce the number of unknowns
- Working on a plan to tie this project together with water loss reduction.
- The plan is to prioritize excavations for service line material verification with services

Personnel

- We have filled one of the two open positions on the Operations team.
 - Happy to welcome Cooper Goodhart back to the Team
- We are continuing to advertise for the other vacant position
- We have received a few applicants and are in the process of reviewing applications.

Projects

- Currently Planning for upcoming summer projects
 - Valve Maintenance
 - Collection System Cleaning
 - Collection System Inspections

- Fire Hydrant Maintenance
- Dig List (various projects that require excavation)

Unaccounted Water

- o Wells 17 and 18 produced 4,027,812 gallons of water in the month of February.
- The District sold its customers 1,780,000 gallons of water in the month of February, leaving 2,247,812 gallons unaccounted for.
- o 56% of the water produced is unaccounted for in the month of February.

> Aspen WWTP and Town of Crestone Loading

- Aspen WWTP averaged 39% of hydraulic loading capacity in the month of February, the Town of Crestone contributed and average of 21% of the treatment plants hydraulic load.
- Aspen WWTP averaged 46% of organic loading capacity in the month of February. The Town of Crestone contributed an average of 31% of the treatment plants organic load.

