



DISTRICT MANAGER REPORT

To: Baca Grande Water and Sanitation District Board of Directors
 From: JoAnn Slivka, District Manager
 Date: June 21, 2023

MASTER PLAN

Grants and Loans

USDA-RD Apply- I have been coordinating with Element Engineering on the RD Apply Loan Application for the Wastewater Improvements Project. We have completed all the steps to submit the application.

- A Public notice is required that informs the local public of the District's intention to apply for a loan with the USDA. The Notice was published online as well as in the June publications of the Crestone Eagle and the Saguache Crescent. The notice advises that should the public have any questions regarding the project they should notify the District.

CDPHE DWRP Pre-Loan Planning Grant Project #960062D-Q

The District received a grant of up to \$10,000 from CDPHE that will help defray the costs of the documents required by the Revolving Fund program toward the Water Improvement Project.

- Pay Request #3 has been submitted for \$4224.00 leaving the fund balance at \$1968.00.
- Element Engineering submitted the draft water system improvements Project Needs Assessment for staff review. We will send to the Board for their review and schedule a meeting for discussion. Element will create a summary handout as they did for the wastewater PER.

Saguache County ARPA Grant Request – Received!

The Saguache County Board of Commissioners approved our application for grant funds towards our Water Loss Prevention Plan Program (WLPPP). There were two components of the request- the Water Meter Vault and the Pressure Reducing Valve (PRV) Vault. The commissioners approved funding for both components – part came from the last of their ARPA funds and the remainder from their PILT funds for a total of \$137,000. We received the check and staff will work with Element Engineering to coordinate the project. We sincerely thank the commissioners and Wendi Maez for their support of the District and our community. The commissioners do request a follow up meeting with the District.

Bond and Loan Payments

Ms. Fromm initiated and I initiated and approved the UMB and ColoTrust wires for our Bond and Loan for the first half of our 2023 commitments.

Amendment No. 1 Water Services Agreement between the USFW and BGWSD

The short term rate reduction for the Water Services Agreement between the USFW and BGWSD has been fully executed. Beginning with the July invoice for June usage, the District will begin paying \$75 per acre/foot for water vs. the \$244.27/af we have been paying since June 2015. This is a substantial reduction that will save the District an estimated \$58,000.00 over the upcoming year.

LINE EXTENSIONS

- 590 Hillcrest: As reported last month, the Bid Package and Plans were published for this project.
 - The bid opening occurred June 2, 2023.
 - Element Engineering provided a letter and the bid tabulation for the Board's consideration at the June 2023 Board meeting. I recommend approval of the recommended award to Cooley and Sons Excavating, Inc. with the bid of \$80,250.

NOTICE OF INTENET TO FILE APPLICATION

The Baca Grande Water and Sanitation District intends to file an application for federal financial assistance with the U. S. Department of Agriculture, Rural Development, Rural Utilities Service. The proposed project includes complete replacement of the district's existing WWTF with a new sequencing batch reactor (SBR) WWTF, UV disinfection, effluent flume with flow recording, and a new treatment building to house equipment and laboratory/office space. Additionally, backup generators will be purchased with the project to maintain consistent power supply to lift stations located within the district's collection system.

Any comments regarding this application should be submitted to the Baca Grande Water and Sanitation District at PO Box 520, Crestone, CO 81131.

AMERICAN RESCUE PLAN ACT (ARAP)

Funding Application

**WATER LOSS PREVENTION PLAN
Pressure Regulating Valve /
Distribution System Meter Project**

JANUARY 2023

**BACA GRANDE WATER and SANITATION
DISTRICT**



*Water is Life
Water is our Business*

**ARPA Funds Project Request:
Baca Grande Water and Sanitation District Water Loss Prevention Plan
Pressure Regulating Valve / Distribution System Meter Project**

Applicant:

Legal Entity:

Baca Grande Water and Sanitation District

Project and Consulting Engineer Contact:

Consulting Engineer Name:

Nicholaus Marcotte

Property Address:

57 Baca Grant Way S

Saguache County

Crestone, CO 81131

Email Address:

nmarcotte@elementengineering.net

Phone Number:

303-378-2969

Business Contact:

District Manager:

JoAnn Slivka

joann@bacawater.com

719-256-4310

Address:

12687 W. Cedar Drive

Lakewood, CO 80228

Mailing Address:

PO Box 520

Saguache County

Crestone, CO 81131

The Baca Grande Water and Sanitation District (District) is a Title 32 special district that owns and operates a public water drinking system under PWSID CO0155200 which consists of raw water supply, treatment, distribution, and potable water storage. The district utilizes two groundwater wells: Well 17 and Well 18.

The district's service boundary encompasses four subdivisions which include: Chalet 1, Chalet 2, Chalet 3, and the Mobile Home Estates (MHE) also known as Casita Park. The current district population is estimated to be 1,657 people. The water and wastewater service areas are essentially equivalent. The district does not currently have firm plans to expand outside of the existing service area Exhibit C.

The district currently serves 780 residential water taps which account for approximately 70% of the overall water usage within the district. Additionally, there are 22 non-residential taps which comprise of small businesses, religious centers, and the Colorado College Baca Campus. The existing system includes two groundwater wells, a 47,000-gallon concrete raw water storage tank, a water treatment facility, six booster pump stations, six potable water storage tanks, 64 miles of 2-inch to 8-inch potable water pipe, and appurtenances such as valves, meters, and meter pits.

Every water system experiences water loss. Over the years, District staff have been working towards developing a water loss prevention program. We have worked with the Colorado Water Loss Initiative (CWLI) receiving water loss training and technical assistance offered to Colorado water systems by the Colorado Water Conservation Board (CWCB).

ARPA Funds Project Request:

Baca Grande Water and Sanitation District Water Loss Prevention Plan Pressure Regulating Valve / Distribution System Meter Project

Currently, District staff are working with Element Engineering to further develop the water loss prevention program. This prevention program will take several months to collaboratively develop. Our initial meeting has identified the following items to focus on:

- **PRV (Pressure Regulating Valve) 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

The average water loss in the distribution system is calculated to be 44%. Water losses for the system exceed the maximum acceptable water loss of 10-15%.

District staff is interested in applying for Saguache County ARPA grant funds to improve our drinking water infrastructure by potentially contributing to the cost for relocation of PRVs and installation of flow meter vaults to study. The requested funds target projects that improve drinking water infrastructure and contribute to sustainability efforts by improving the distribution system.

Uses for this grant money consist of installation of metering vaults, PRVs, and water shutoff valves to better isolate for breaks. Funding could also go towards purchase of leak detection equipment.

This combination of projects will initiate the District's efforts to reduce its water loss. The first project is to add two pressure regulating valves that would lower the pressure in an area that is prone to leaks because of the excessive pressure in the area.

The next project involves adding two metering vaults in the distribution system to help better identify areas with the greatest losses. This will allow the district to prioritize its resources for future water conservation projects. Cost estimates are provided in Exhibits A& B.

*** Please note the cost of the project is for two each of the Metering Vaults and the PRV Vault for a total project cost of \$137,640.00.**

**ARPA Funds Project Request:
 Baca Grande Water and Sanitation District Water Loss Prevention Plan
 Pressure Regulating Valve / Distribution System Meter Project**

EXHIBIT A

Water Meter Vault - Preliminary Cost Estimate

METERING VAULT					
CONSTRUCTION ITEMS					
ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	SUBTOTAL
1	5-ft Diameter Pre-Cast Manhole (6-ft Depth)	2	LS	\$ 8,500	\$ 17,000
2	Flow Meter, Meter Transmitter and Unistrut Rack, Manual Valves	2	LS	\$ 14,500	\$ 29,000
3	Road Base and Access	20	SY	\$ 150	\$ 3,000
Subtotal Construction Items					\$ 49,000
Instrumentation, Controls, and Electrical					\$ 9,000
Contractor Overhead and Profit (10% Subtotal Construction Items)					\$ 4,900
Subtotal Items					\$ 13,900
Total Construction Cost					\$ 62,900
CONTINGENCY AND NON-CONSTRUCTION COSTS					
Construction Contingency (10% Total Construction Cost)					\$ 6,290
Engineering (Schematic Design Assumed)					\$ 7,000
Total Contingency and Non-Construction Costs					\$ 13,290
Total Metering Vault Project Cost					\$ 76,190

**ARPA Funds Project Request:
 Baca Grande Water and Sanitation District Water Loss Prevention Plan
 Pressure Regulating Valve / Distribution System Meter Project**

EXHIBIT B

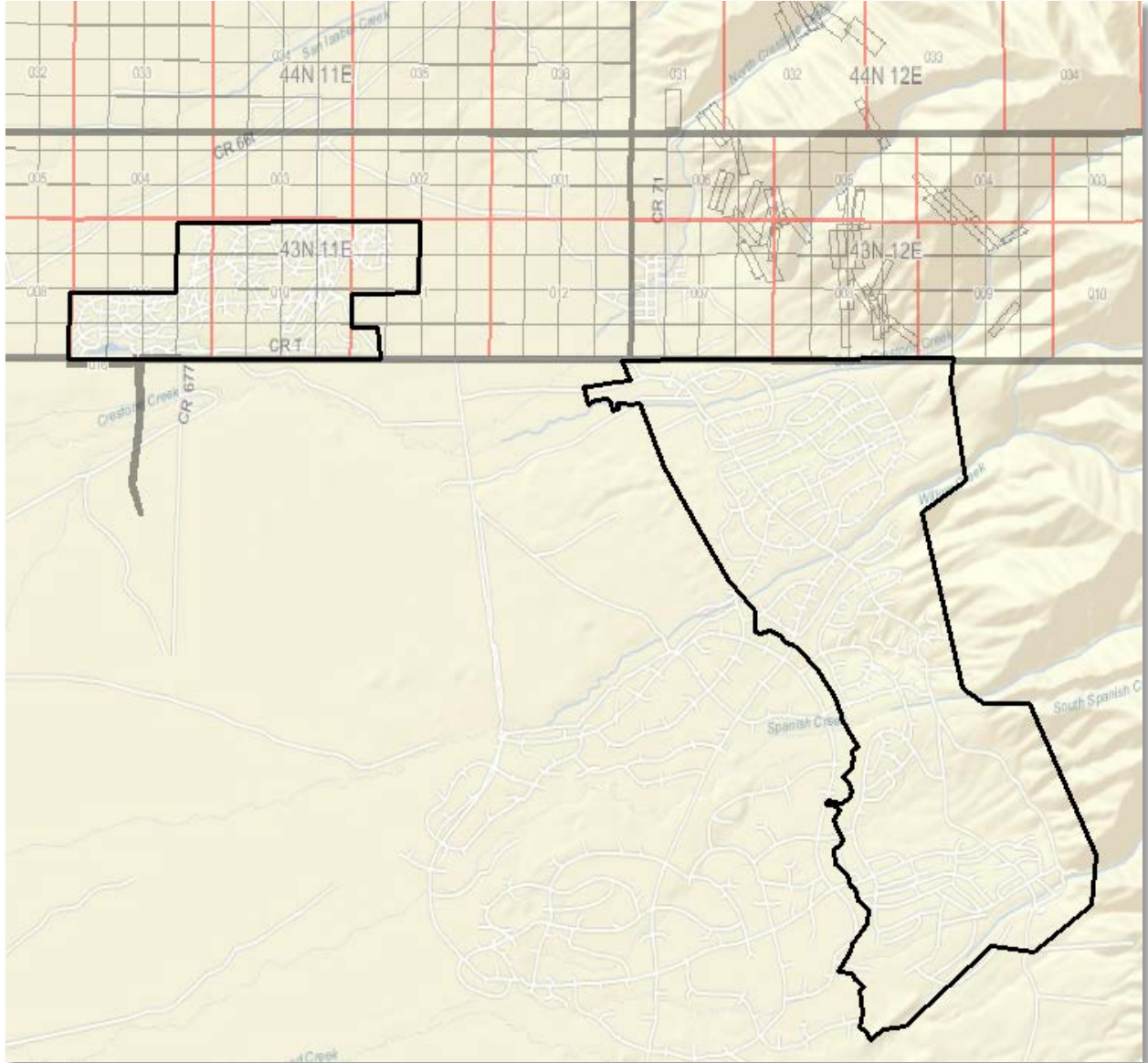
Pressure Reducing Valve (PRV) Vault - Preliminary Cost Estimate

PRV VAULT					
CONSTRUCTION ITEMS					
ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	SUBTOTAL
1	5-ft Diameter Pre-Cast Manhole (6-ft Depth)	2	LS	\$ 8,500	\$ 17,000
2	Pressure Reducing Valve and Manual Valves	2	LS	\$ 12,500	\$ 25,000
3	Road Base and Access	20	SY	\$ 150	\$ 3,000
Subtotal Construction Items					\$ 45,000
Instrumentation, Controls, and Electrical					\$ -
Contractor Overhead and Profit (10% Subtotal Construction Items)					\$ 4,500
Subtotal Items					\$ 4,500
Total Construction Cost					\$ 49,500
Construction Contingency (10% Total Construction Cost)					\$ 4,950
Engineering (Schematic Design Assumed)					\$ 7,000
Total Contingency and Non-Construction Costs					\$ 11,950
Total PRV Vault Project Cost					\$ 61,450

**ARPA Funds Project Request:
Baca Grande Water and Sanitation District Water Loss Prevention Plan
Pressure Regulating Valve / Distribution System Meter Project**

EXHIBIT C

DISTRICT BOUNDARY MAP



ADMINISTRATIVE MONTHLY REPORT

June 21st 2023

MAY UTILITY BILLING ACTIVITY

Customer Utility Billing		
Billing Category	Number of Accts	Amount Billed
Usage Customers Billed - SEWER	813	\$39,778.35
Usage Customers Billed - WATER	828	\$58,834.58
ON/OFF Service	7	\$275.00
LATE FEE	42	\$840.00
TRANSFER	19	\$6,650.00
TAP	1	-\$10,000.00
W-S HOOK UP & PARTS	5	\$13,050.00
EQR	27	\$785.75
NSF FEE	1	\$30.00

MAY XPRESS BILL PAY TRANSACTION ACTIVITY

Product / Service Description	Qty	Unit Price	Line Total
EFT Web Transactions	246	0.49	\$120.54
Credit/Debit Card Web Transactions	365	0.39	\$142.35
Online Banking - Bank Bill Pay Transactions	30	0.25	\$7.50
Lock Box Service Transactions	218	0.48	\$104.64
Toll Free Operator Assisted Transactions	2	0.95	\$1.90
Toll Free IVR Transactions	5	0.95	\$4.75
Support, Maintenance, Hosting - Fee	1	75.00	75.00
EFT Return NSF or Account closed	1	12.00	12.00

Town of Crestone Sewer 2023

Town of Crestone Sewer Billing - 2023

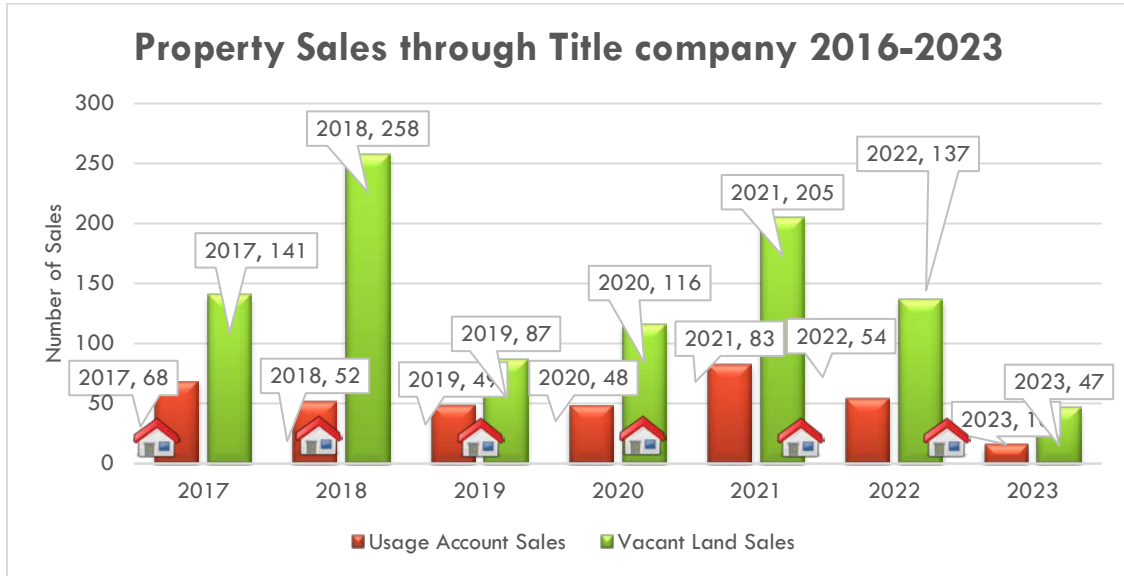
Date	Monthly Total	Monthly Flow	Flow Charges	Average Daily BOD	Monthly BOD	BOD Charges	Paid	Balance Due
January	434,425	3,431,957.50	\$ 3,431.96	54	1674	\$ 1,658.93	Check # 2596	02/28/2023- \$5,090.89
February	404,042	3,191,931.80	\$3,191.33	57	1596	\$1,581.64	Check #2604	03/31/2023- \$4,773.57
March	391,356	3,091,172.40	\$3,091.71	51	1581	\$1,566.77	Check #2612	04/30/2023- 4,658.48
April	484,123	3,825,282.70	\$3825.28	38	1140	\$1,129.74	Check # 2587	05/31/2023- \$4955.02
May	452,229	3,572,609.10	\$3,572.61	43	1333	\$1,321.00		06/30/2023- \$4,893.61
June								
July								
August								
September								
October								
November								
December								
2023 Totals	1,714,036		\$13,540.88	200	5991	\$5,937.08		

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

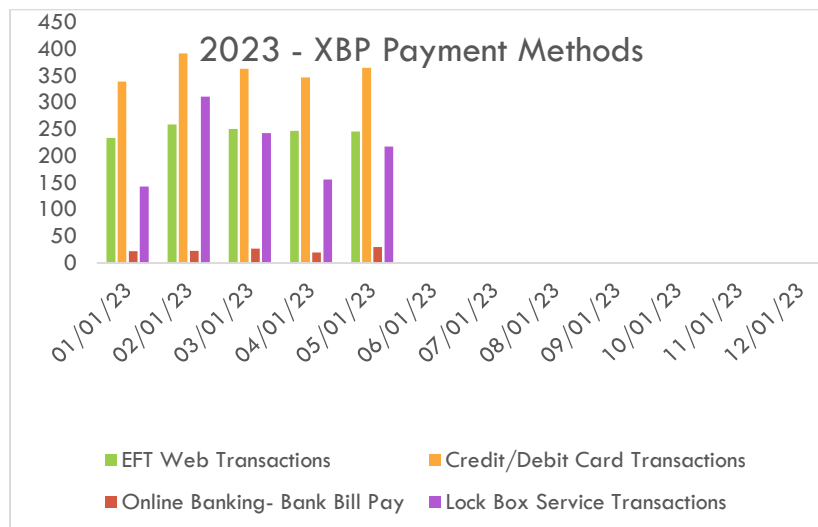
May - 2023- Property Sales: 5 - Homes, 10 - Lots



May - 2023 – Other Sales Statistic Including Name Changes:

May Other Sales			
Type	Vacant Lot	House	Total Charges
Quick Claim Deed	3	3	\$700.00
Warranty Deed	1	1	\$350.00
Treasurer's Deed	1	0	\$350.00
Bargain & Sale Deed	1	1	\$0.00
Contract for Deed	0	1	\$0.00

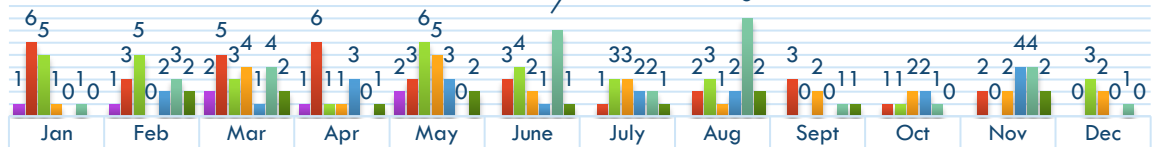
2023 XBP CUSTOMERS PAYMENT METHODS



2023 WATER-SEWER HOOKUP APPLICATIONS

2 – APPLICATION (S) RECEIVED IN MAY, 7 – TOTAL IN 2023

Water-Sewer Hookups 2016-2023

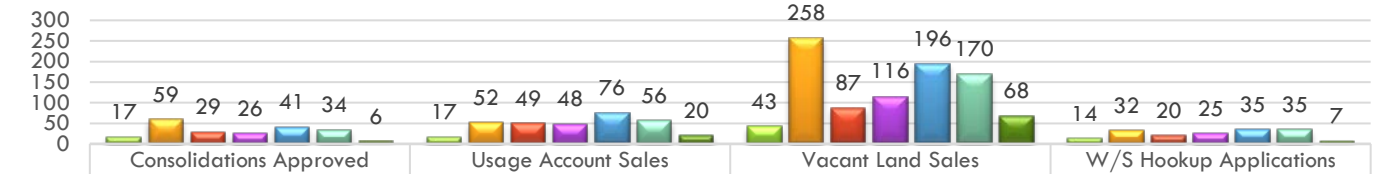


	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2023=7	1	1	2	1	2	1	1	2	0	0	2	0
2022=35 hookups	6	3	5	6	3	3	1	2	3	1	2	0
2021=35 hookups	5	5	3	1	6	4	3	3	0	1	0	3
2020=25 hookups	1	0	4	1	5	2	3	1	2	2	2	2
2019 = 20 hookups	0	2	1	3	3	1	2	2	0	2	4	0
2018= 32 hookups	1	3	4	0	0	7	2	8	1	1	4	1
2017= 14 hookups	0	2	2	1	2	1	1	2	1	0	2	0

■ 2023=7
 ■ 2022=35 hookups
 ■ 2021=35 hookups
 ■ 2020=25 hookups
■ 2019 = 20 hookups
 ■ 2018= 32 hookups
 ■ 2017= 14 hookups

2016-2023 PROPERTY TRENDS

District Property Trends 2016-2023



	Consolidations Approved	Usage Account Sales	Vacant Land Sales	W/S Hookup Applications
2017	17	17	43	14
2018	59	52	258	32
2019	29	49	87	20
2020	26	48	116	25
2021	41	76	196	35
2022	34	56	170	35
2023	6	20	68	7

■ 2017
 ■ 2018
 ■ 2019
 ■ 2020
 ■ 2021
 ■ 2022
 ■ 2023

Office & Administrative Activities:

LIHWAP: In May we received a payment from LIHWAP that was applied to four of our customers in the total amount of \$782.08. The District also received report for the month of June stating more payments are coming to four customers.

Real Time Payments: Natalie is currently working on implementing “Real Time Payments” module that would be syncing data between billing software and Xpress Bill Pay in real time, and would also help to have more automated process.

PILOT: The District received a payment in lieu of taxes from Shumei in the amount of \$3,525.39. We are thankful for their support.

Water Outage: Water Main break May 24 and June 1st, the main water lines were hit during the residential water & sewer hook up's. Notices were posted on the BGWSD website.

Grants: CSDPLP safety grant was approved and we are currently awaiting a payment.

Security Cameras Installation: On May 8th had a site visit with one of our vendors and security cameras were ordered. On June 7th-8th the installation was successfully completed. Natalie is currently working on sending the Grant report to Saguache County.

Personnel: Johann McKee training is going well, she had training with Jennifer on consolidations process and late fee billing and daily tasks, she also took recorded Caselle and XBP webinars and trained with Natalie on various tasks.

Assessor's Report: a list of vacant properties located in the Baca Grande Water and Sanitation District that now include residential improvements was sent to Saguache County Assessor office.

AOS Verification Project: Administrative and Operation Staff continues to work on AOS verifications for properties with NO AOS, Water Only & Sewer Only Services.

AOS Notification: On June 7th a blast notification was sent through XBP to remind vacant property owners of upcoming AOS dues. We received a great response and many payments.

Personnel: In the month of May and beginning of June, Natalie performed 8 notarizations.

Delinquent water shut off:

In the month of June there were two delinquent shut off. One of the account still remains shut off for nonpayment.

June's Billing Message: Welcome to Summer! Remember to get your 2023 Availability of Service (AOS) payments for vacant lots in by 6/30/2023, to avoid late charges. In observance of Juneteenth, our office will be closed on Monday, June 19th. We will resume normal business hours on Tuesday, June 20th. To make a payment by phone, please call the Payment Center at 800-720-6847 or the IVR line at 888-504-0548. In case of a water emergency, please call 719-256-4310.

Upcoming:

- * Vacant properties AOS due – June 30th
- * 2023 Annual Certification of delinquent Accounts.



Dear BGWSD Vacant Lot Account Holders,

This is a reminder that the annual Availability of Service (AOS) fees on vacant lots are due to be paid on or before June 30, 2023.

If you have Auto Pay set up, please log onto your account at xpressbillpay.com and verify that the payment method is still active.

Other payment options available:

BY PHONE: The Payment Center is available during business hours at 800-720-6847 and the IVR line is open 24/7 at 888-504-0548.

USPS- DROP IT IN THE MAIL:

Baca Grande Water and Sanitation Payment Processing Center
PO Box 397
Pleasant Grove, UT 84062

OVERNIGHT PAYMENT BOX: You can drop off your payment at the office anytime: There is a drive-up payment box in the parking lot at the District office located at [57 Baca Grant Way S](#) in Crestone.

IN PERSON: If you enjoy doing business face-to-face you can always stop by the BGWSD office at 57 Baca Grant Way S to pay your bill.

If you have already paid your fees for this year, please disregard this group notice.

Thank you!

Baca Grande Water & Sanitation District



Baca Grande Water and Sanitation District
P.O. Box 520 | 57 Baca Grant Way S.
Crestone, CO 81131-0520

In honor of Juneteenth, the District office will be closed

Monday
JUNE 19TH, 2023

Emergencies can be called in at 719-256-4310 and an operator will be dispatched to assist you.

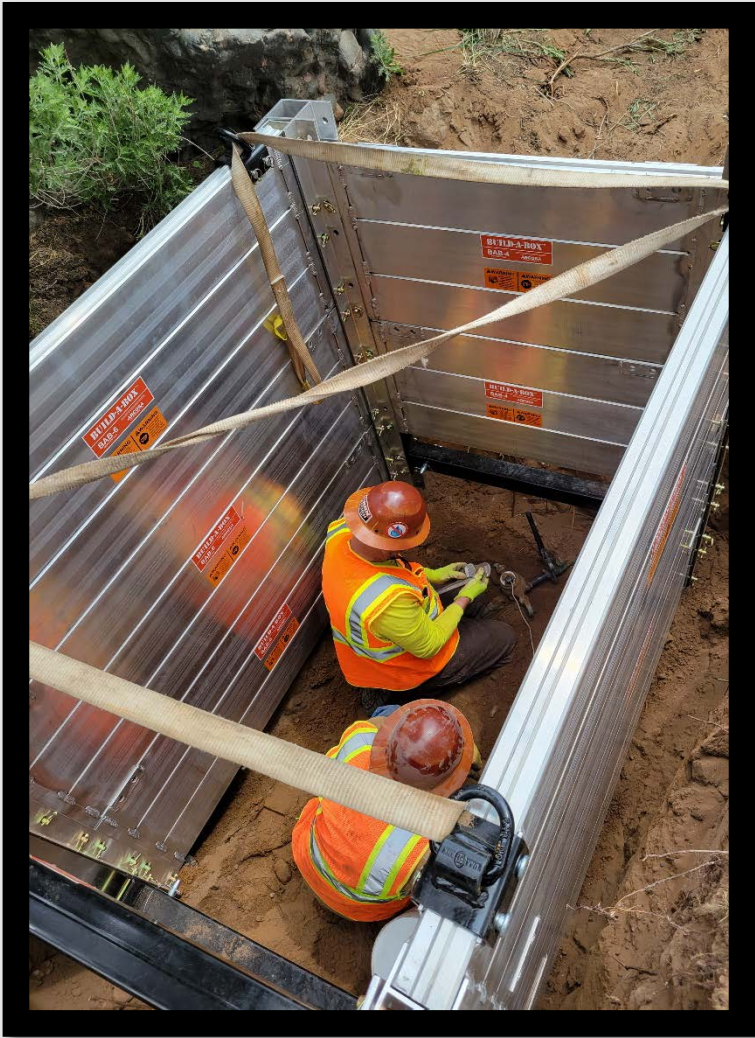
Pay by phone by calling 800-720-6847.



t: 719-256-4310 | f: 719-256-4309 | www.bacawater.com | info@bacawater.com

Baca Grande Water and Sanitation District Monthly Operations Report

June 21st, 2023



Pictures of new Shoring Equipment being used to replace a meter pit.

Facilities and Staff Updates

In Service

Repaired
last month

Out of
Service

Water Facilities											
Well 18		Moonlight Transfer Station		Ridgeview Transfer Station		Fallen Tree Transfer Station		Pinecone Booster Station		Shumei Booster Station	
Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2

Wastewater Facilities									
Aspen WWTP		Stables Lift Station		Wagon Wheel Lift Station		MHE Lift Station		Dharma Ocean Lift Station	
Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2	Pump 1	Pump 2

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

Equipment				
Vector Truck	Dump Truck	Backhoe	Skid steer	Excavator

- **Dharma Ocean**
 - Pump 2 has failed. Pump is being evaluated.
- **Well 18**
 - The Motor for Well 18 Booster Pump 2 has failed. Motor is being rebuilt.
- **Vector Truck**
 - Vector still has loss of power issue, we are on our 3rd mechanic trying to identify the problem. Hoping to have this issue resolved soon.
- **Accidents**
 - Happy to report no accidents in May!!

Operations Updates

➤ 2023 the Year of Safety

- New trench shoring safety equipment has arrived. Operations staff will begin implementing the equipment into our trenching activities this summer!

➤ Water Conservation Plan

- We received grant funding from the county
- The funds will be used for project that will help us narrow our focus in our search for water loss.

➤ Meter Pit Issues

- 26 of the 27 radio reading devices (MXU's) have been installed.
- 10 Meters still installed without radio reading devices.
- Waiting on 9 MXU's ordered December 2021
- Waiting on 20 meters and 20 MXU's ordered May 2022

➤ Aspen Online Monitoring Equipment

- All equipment has been installed by operations staff.
- Ambient H2O will be here 6/20/23 for startup and training

➤ Upcoming Summer Projects

- Annual fire hydrant maintenance
 - Currently 241 for 273 Hydrant have been service.
- Valve exercising and maintenance planned to start soon.
- Annual collection system cleaning and inspections
 - In Process, but have had delays due to equipment issues
- Dig list (meter pit replacement, sewer mainline repair, etc.) starting now.

➤ Unaccounted Water

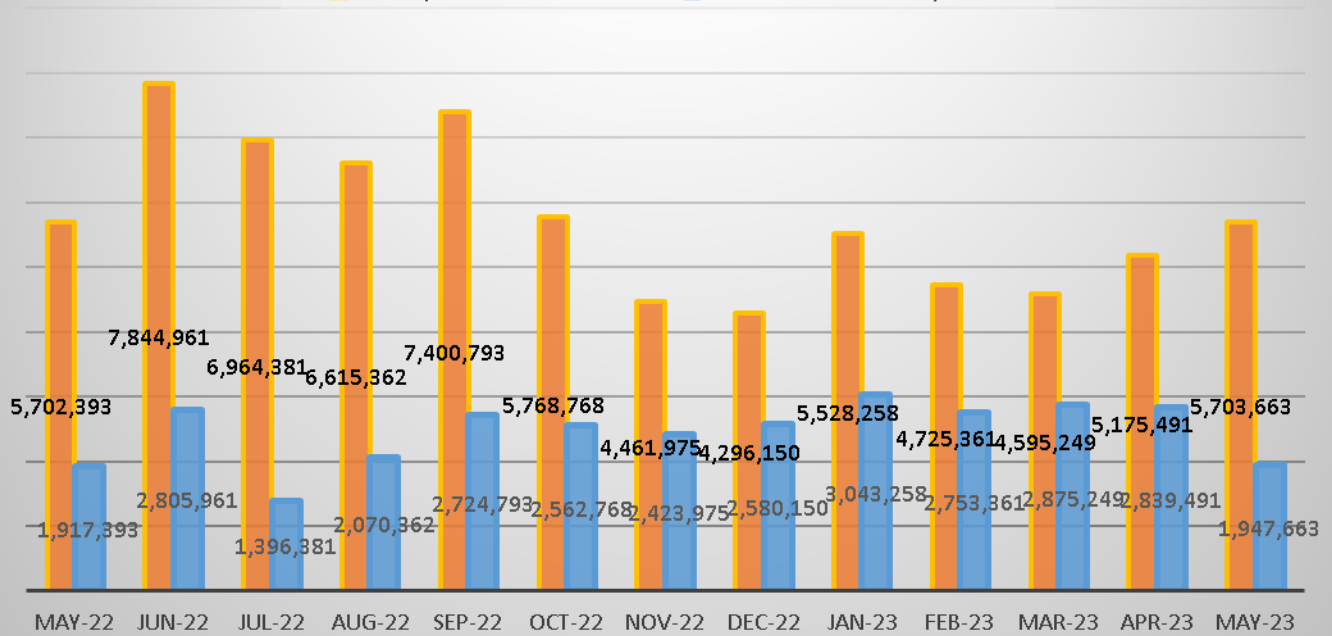
- Wells 17 and 18 produced 5,703,663 gallons of water in the month of May.
- The District sold its customers 3,756,000 gallons of water in the month of May, leaving 1,947,663 gallons unaccounted for.
- 34% of the water produced is unaccounted for in the month of May.

➤ **Aspen WWTP and Town of Crestone Loading**

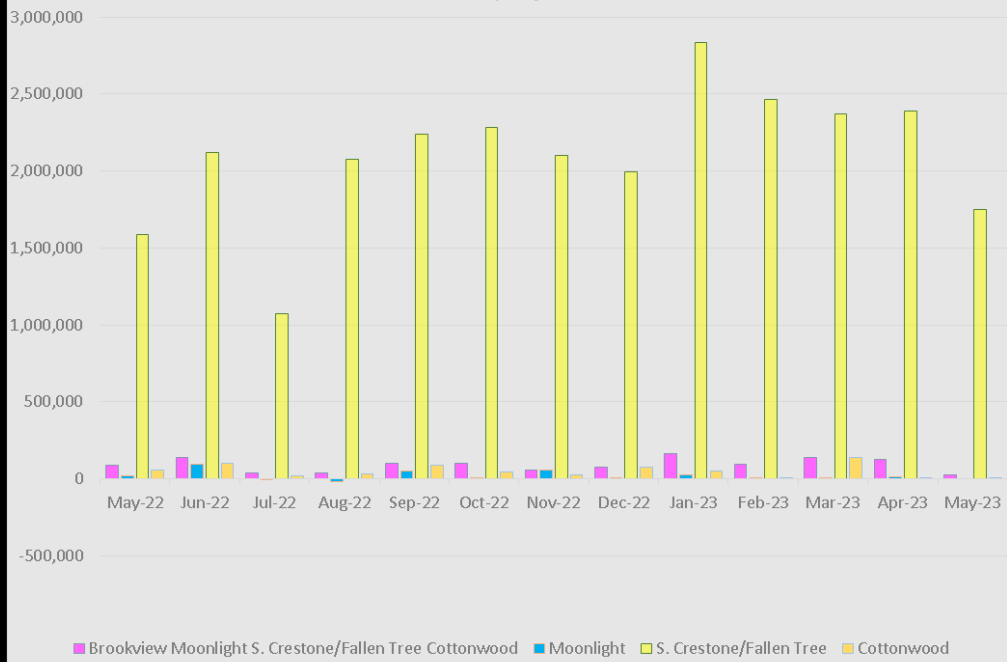
- Aspen WWTP averaged 42% of hydraulic loading capacity in the month of May, the Town of Crestone contributed and average of 23% of the treatment plants hydraulic load. Aspen WWTP averaged 42% of organic loading capacity in the month of May. The Town of Crestone contributed an average of 43% of the treatment plants organic load.

Total Unaccounted Water by Month

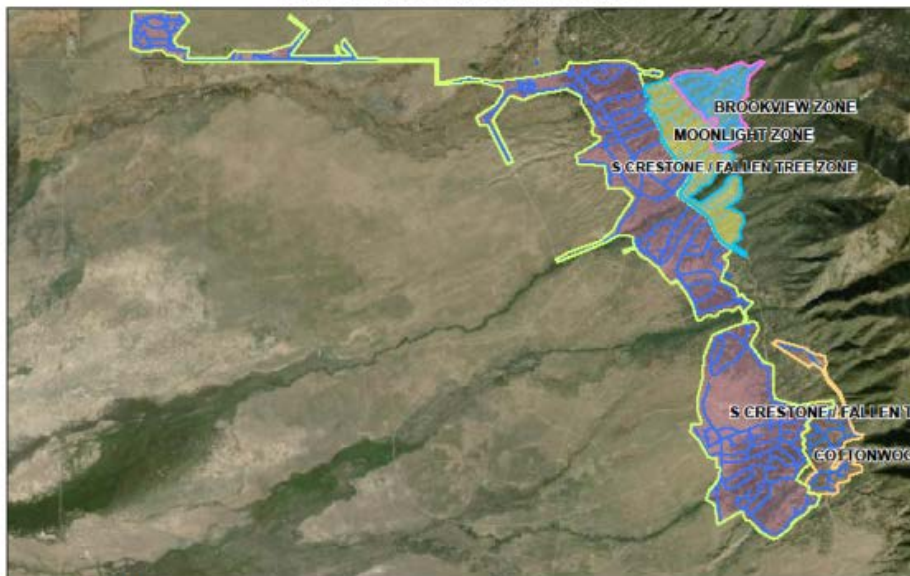
Well 17/18 Gallons Produced Gallons Unaccounted by Month



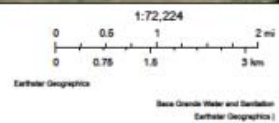
Total Monthly Unaccounted in Gallons by Pressure Zone



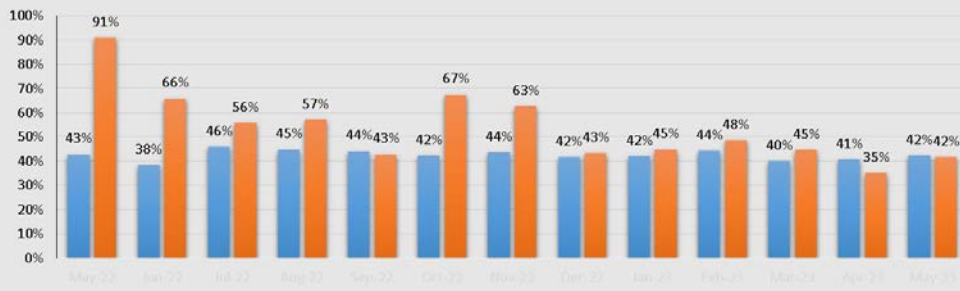
BGWS D Unaccounted Water Zone's



12/10/2020, 3:43:14 PM



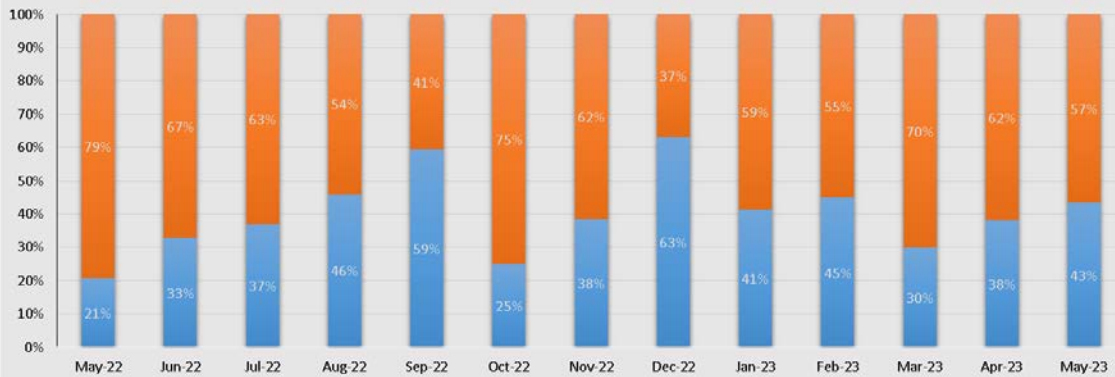
Percentage of Plant Capacities by Month at Aspen Wastewater Treatment Plant



	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23
Plant % of Hydraulic Capacity	43%	38%	46%	45%	44%	42%	44%	42%	42%	44%	40%	41%	42%
Plant % of Organic Capacity	91%	66%	56%	57%	43%	67%	63%	43%	45%	48%	45%	35%	42%

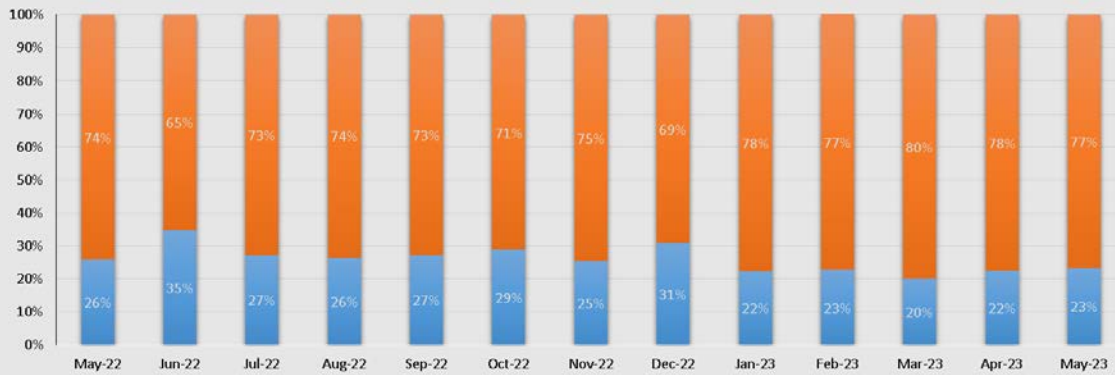
■ Plant % of Hydraulic Capacity ■ Plant % of Organic Capacity

Average % of Total Organic Loading of Aspen Wastewater Treatment Plant by Month of 2022-2023



■ Town of Crestone % of Organic Loading ■ Baca % of Organic Loading

Average % of Total Hydraulic Loading of Aspen Wastewater Treatment Plant by Month 2022-2023



■ Town of Crestone % of Hydraulic Loading ■ Baca % of Hydraulic Loading