

PAGOSA AREA WATER AND SANITATION DISTRICT)
)
ARCHULETA COUNTY) S.S.
)
STATE OF COLORADO)

NOTICE OF REGULAR MEETING

NOTICE IS HEREBY GIVEN that a Regular Meeting of the Board of Directors of the Pagosa Area Water and Sanitation District (PAWSD) has been scheduled for Thursday March 9, 2023 at 5:00 p.m. The Regular Meeting will be held at 100 Lyn Avenue, Pagosa Springs, Colorado.

Proposed Agenda is as follows:

Regular Meeting

1. Call to Order
2. Roll Call
3. Approval of Minutes – 1/30/2023 Regular Meeting & 2/9/2023 Regular Meeting
4. Consideration of Fee Waivers for Archuleta County
5. Consideration of Waiving Back Fees for 251 Pebble Circle
6. Consideration of Resolution 2023-04 District Use of CIP Affordable Housing Surcharge
7. Consideration of Adopting the 20 Year Capital Investment Plan
8. Public Comment
9. Manager Talking Points
10. Any other Business Brought before the Board will be Duly Considered

PAGOSA AREA WATER AND SANITATION DISTRICT

By /s/ Justin Ramsey
For the Board of Directors

SEAL



1 **RECORD OF PROCEEDINGS**
2 **PAGOSA AREA WATER AND SANITATION DISTRICT**
3 **January 30, 2023 REGULAR MEETING**
4

5 **Call to Order**
6

7 The Regular Board Meeting for the Pagosa Area Water and Sanitation District (PAWSD) was called to
8 order by Chairman Smith at 5:02p.m.
9

10 **Attendance**
11

12 The following Directors were present: Jim Smith, Glenn Walsh, Bill Hudson, Peter Hurley, and Gene
13 Tautges.
14

15 In attendance from staff: Justin Ramsey, Aaron Burns, and Cyndi Foster. Also present: Alan Pfister, Carl
16 Young, Josh Pike, McKenna Pearson, Mark Maxwell, Dana Guinn, Renee Lewis, Tobi Rohwer, Candace
17 Jones, and Terri House.
18

19 **Approval of Minutes**
20

21 The Directors reviewed the minutes from the December 15th, 2022 Regular Meeting. A motion was made
22 by Director Tautges to approve the December 15th, 2022 minutes with no revisions and seconded by
23 Director Hurley. The motion passed unanimously.
24

25 **Public Comment**
26

27 Alan Pfister requested that the PAWSD Board and San Juan Water Conservancy District Board have a
28 joint meeting. The PAWSD board decided that they would discuss PAWSD future water demand at the
29 next board meeting on February 9th, 2023. After this discussion, a meeting will be scheduled for the two
30 boards to have a joint meeting. There was no further discussion on the matter.
31

32 Tobi Rohwer asked if anything had been decided regarding the possibility of public access on the Dry
33 Gulch property. Justin Ramsey explained that nothing had been decided and explained that the board
34 would not be able to make any decisions on it at this meeting since it's not an agenda item but that it
35 could be discussed. There was no further discussion on the matter.
36

37 **Public Hearing on 2023 Water & Wastewater Rate Increases**
38

39 A motion was made by Director Hudson to open the public hearing for the 2023 water and wastewater
40 rate increases and seconded by Director Tautges. There being no discussion, a motion was made by
41 Director Hudson to move out of the public hearing and seconded by Director Tautges. The motion
42 passed unanimously.
43

44 **Consideration of 2023 Water & Wastewater Rate Increases**
45

46 Aaron Burns explained that the 2023 rate increase follows the 2018 Stantec Rate Study which prescribes
47 a 6% water rate increase through 2023 and a 2.5% wastewater rate increase which has been accelerated

to begin in 2023 instead of 2024. Mr. Burns further explained that PAWSD will be conducting a new rate study in 2023. Director Tautges asked if the new wastewater rate increase accounts for the upgrades to the wastewater treatment plant. Aaron Burns answered that the new rates do not account for the proposed wastewater treatment plant, but those figures will be included in the new rate study. A motion was made by Director Hudson to approve the 2023 water and wastewater rate increases and seconded by Director Hurley. The motion passed unanimously.

Consideration of 2023 Connection Charges and Adjustments to Other Non-Rate Revenue

Aaron Burns explained that the fees on the 2023 Connection Charges and Adjustments to Other Non-Rate Revenue document are fees that are billed throughout the year that pertain to all various charges which include connection fees, turn on/turn off fees, etc. These fees have been adjusted to account for the increase in the cost of materials and labor. Director Smith asked why the equity buy in fee is decreasing. Aaron Burns explained that the equity buy in fee is a number formulated off PAWSD's current net asset value. Each year our assets depreciate so the equity buy in fee will go down until we add something to our assets like the water treatment plant or a wastewater treatment plant. A motion was made by Director Tautges to approve the 2023 connection charges and adjustments to other non-rate revenue and seconded by Director Hudson. The motion passed unanimously.

Consideration and Approval of 2023 Board Meeting Schedule

Director Hudson made a motion to approve the 2023 board meeting schedule which states PAWSD will have regular board meetings at 100 Lyn Ave on the second Thursday of each month at 5:00p.m. excluding July and November. The motion was seconded by Director Tautges. The motion passed unanimously.

Consideration of Resolution 2023-01 Board of Directors Annual Posting for Meetings

A motion was made by Director Tautges to approve Resolution 2023-01 Board of Directors Annual Posting for Meetings and seconded by Director Hudson. The motion passed unanimously.

Public Hearing for Vista Wastewater Treatment Plant Modification SRF Loan

A motion was made by Director Hurley to open the public hearing for the Vista Wastewater Treatment Plant Modification SRF Loan and seconded by Director Hudson. Mark Maxwell from Tetra Tech gave a presentation regarding the SRF Loan for the Vista Wastewater Treatment Plant (Presentation attached as "Exhibit A"). A motion was made by Director Hudson to close the public hearing for the Vista Wastewater Treatment Plant Modification SRF Loan and seconded by Director Tautges. The motion passed unanimously.

Consideration of Grant Consulting Contract

Renee Lewis oversaw PAWSD grants in 2022 and maxed out the grants in 2022. Renee Lewis explained that although she is unsure what her involvement will be in 2023 with grants, she prepared this contract, so she is able to assist in any 2023 grants and to finalize a few outstanding invoices from 2022 grants. A motion was made by Director Tautges to hire Renee with the grant consulting contract to handle PAWSD grants in 2023 and seconded by Director Hurley. The motion passed unanimously.

96 **Consideration of Election Consulting Contract**

97
98 Director Smith explained that all five board directors' terms are up and that he has reached his term
99 limit. He also explained that Renee Lewis has handled PAWSD elections in the past, so she is aware of
100 the process. A motion was made by Director Hudson to contract with Renee Lewis as PAWSD designated
101 election official and seconded by Director Hurley. The motion passed unanimously.
102

103 **Consideration of Resolution 2023-02 Calling for the 2023 Regular District Election and Appointing a**
104 **Designated Election Official**

105
106 There being no discussion, a motion was made by Director Tautges and seconded by Director Hudson to
107 approve Resolution 2023-02 with the understanding that PAWSD is contracted with Renee Lewis to
108 serve as PAWSD designated election official. The motion passed unanimously.
109

110 **Discussion of the 7th Ave 8-Plex Workforce Housing Fee Waiver Template**

111
112 Peter Hurley explained that he is developing an 8-plex next to his existing 4-plex. When he developed
113 the existing 4-plex, he paid for 4 connections at full cost. Peter Hurley provided the board members with
114 a chart that displayed all 12 of the units and the estimated AMI for these units. According to Mr.
115 Hurley's chart, the estimated AMI for the 12 units is as follows; 4 units under 80% AMI, 2 units under
116 100% AMI, 2 units under 120% AMI, and 4 units at 120% AMI. According to the chart, 6 of the 12 units
117 would qualify for affordable housing discounted rates. Since the existing 4-plex has already had its fees
118 paid at full cost, PAWSD would be looking at these units retroactively, essentially providing a rebate for
119 those existing units. Peter Hurley asked that the board consider including the existing 4 units for an
120 affordable housing discount instead of only considering the 8 new units that are being developed. Peter
121 Hurley expressed his concern of the cost of hiring a CPA to annually provide verification that the units
122 are still following affordable housing guidelines. Director Walsh stated that he thinks PAWSD may need
123 to revisit this requirement deadline and potentially expand it to 3 years instead of annually. Justin
124 Ramsey discussed that he is meeting with Andrea from the town and will find out if they have come up
125 with a process for this requirement. Mr. Ramsey explained that the reason PAWSD bills an affordable
126 housing surcharge is to offset lost revenue in capital investment fees for affordable housing. Mr. Ramsey
127 stated that if PAWSD were to offer rebates for affordable housing that the money PAWSD has to offset
128 lost revenue in capital investment fees may no longer be sufficient to offset that lost revenue. The board
129 decided they would like to discuss all matters of affordable housing further on the day of the next board
130 meeting. There was no further discussion on the matter.
131

132 **Consideration of Contribution to the San Juan Headwaters Forest Health Partnership**

133
134 Dana Guinn is the director of San Juan Headwaters Forest Health Partnership. Ms. Guinn prepared a
135 presentation for the board of directors (Presentation attached as "Exhibit B"). In the presentation Ms.
136 Guinn expressed her hope that PAWSD would continue to contribute \$7,000 to SJHFHP. Dana Guinn
137 explained that the preventative work SJHFHP had been doing helped to control the Plumtaw fire. A
138 motion was made by Director Hurley to approve the \$7,000 contribution to SJHFHP and seconded by
139 Director Hudson. The motion passed unanimously.
140
141
142
143

144 **Manager Talking Points**

145
146 Justin Ramsey explained that the water loss numbers haven't improved, they are about the same as
147 they have been. He is concerned that a contributing factor to the water loss number may be the meters'
148 age and that some of the older meters may be under reporting or not reporting usage at all. Mr. Ramsey
149 stated that he is going to the rural water conference in April and plans to reach out to the venders at the
150 conference to see if there is a company PAWSD can hire to test a group of meters to see what
151 percentage those meters are functioning at.
152

153 Mr. Ramsey said that regarding the RFQ to hire a new consultant to do a new rate study, two companies
154 responded, and PAWSD selected Stantec to conduct the rate study. The contract will be considered at
155 the next board meeting.
156

157 **Any Other Business Brought before the Board will be Duly Considered**

158
159 There being no other business brought before the board, a motion was made by Director Tautges to
160 adjourn the meeting at 8:12 p.m. and seconded by Director Hudson. The motion passed unanimously.
161

162
163 Respectfully submitted,
164
165

166
167 Bill Hudson
168 Secretary

Exhibit A



Public Meeting: Pagosa Area Water & Sanitation District, Vista WWTP Phase 1 Permit Compliance and Energy Efficiency Improvements



Justin Ramsey, District Manager
Mark Maxwell, Tetra Tech, Inc.

January 30, 2023 at 5:00 pm

District Board Offices @ 100 Lyn Avenue





Background and Purpose

2019 Permit Renewal - Phase 1 Improvements

- Daily maximum total inorganic nitrogen (TIN) limits for drinking water protection
- Running 12-month median total phosphorous (TP) limits for Regulation 85 compliance
- Renovation, redundancy, operational, and energy efficiency enhancements



Agenda



Growth, Flow, and Organic Load Projections

Phase 1 Permit Compliance and Improvements

Capital Cost Opinion

Potential Phase 2 Improvements (circa 2035)



Growth, Flow, and Organic Load

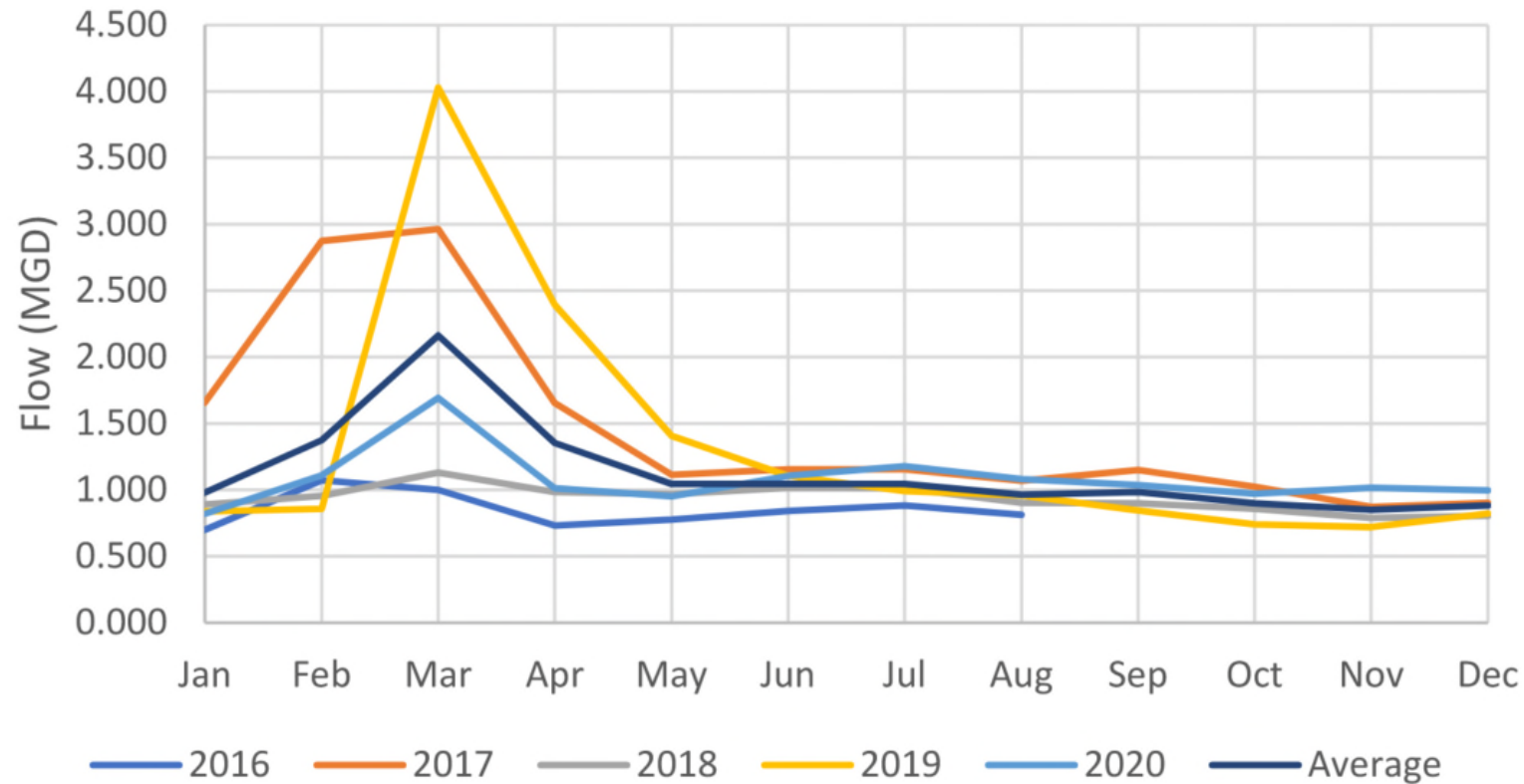


Connected Sewer Taps	About 3,500 with an estimated 8,750 population equivalent (PE)
Highest Flow	Early spring infiltration/inflow (I/I) season
Highest Organic Load	Summer tourist season
CDPHE Hydraulic Capacity	3.7 MGD during high I/I season
Maximum Month Flow	Occurs during early spring 3.0 MGD (81% of capacity)
CDPHE Organic Load Capacity	3,906 pounds per day (ppd) of BOD
Maximum Month Load	Occurs during the summer About 2,800 ppd of BOD (72% of Capacity)
Recent Trends	2.2% compound annual growth

Historic Monthly Average Flows

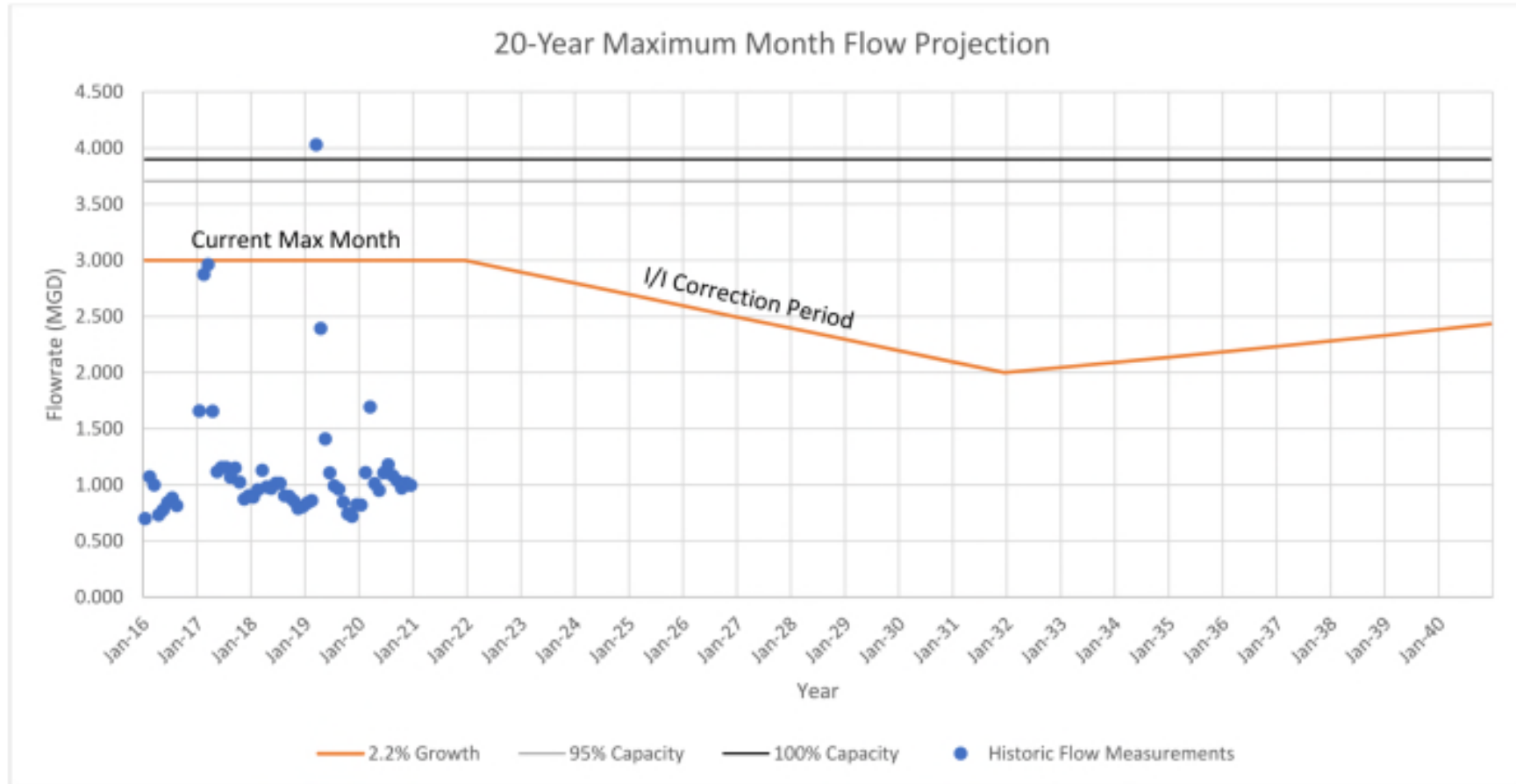


Vista WWTP 30-Day Average Flows



- High I/I season February, March and April
- Flows hold steady May through January

Flow Projections



Based on:

- Long-term I/I reduction
- 2.2% compound annual growth

Phase 1 Permit Compliance and Energy Efficiency Improvements



- Permit Compliance

- Anaerobic and Anoxic (ANA) Basins
- New MLR and RAS pumping
- HST jockey blower
- On/off aeration
- Nitrate reduction to 10 mg-N/L
- Phosphorous reduction to 1.0 mg-P/L

- Operational and Energy Efficiency Improvements

- ✓ Renovate O-ditch diffused aeration system
- ✓ New secondary clarifier
- ✓ New WAS pumps
- ✓ Replace RAS pumps
- ✓ Modify or replace scum pumping
- ✓ New perforated plate influent screen

Preliminary Phase 1 Site Layout

New Secondary Clarifier

Replacement RAS Pumps
and New WAS Pumps

HST Jockey Blower

Replace Diffusers in
Existing Ox Ditches

Submersible MLR Pumps & Walkway

Perforated Plate Screen

ML Combining and
Flow Splitter Box

RAS and Influent
Combining Box

Anaerobic and
Anoxic (ANA)
Basin Complex

Preliminary Phase 1 Capital Cost Opinion



Item	Cost
Equipment and Materials	
Headworks	\$221,000
ANA Basins	\$2,486,000
Oxidation Ditches	\$200,000
Secondary Clarifier	\$2,138,000
Pumps and Blowers	\$622,000
Subtotal - Equipment/Materials	\$5,670,000
Labor and Construction Costs	
Electrical, Sitework, and Demolition	\$291,000
Contractor Markups and Contingency	\$3,392,000
Engineering Services	\$1,403,000
Hard Rock Removal Allowance	\$500,000
Subtotal - Construction Cost	\$5,586,000
Project Total	\$11,256,000 (\$12,900,000 in 2023 dollars)

Remaining Phase 1 Timeline and Completion Dates



- Aug 31, 2023 - CDPHE Loan Approvals
- Aug 31, 2023 - CDPHE Engineering Approvals
- Sept 30, 2023 - Engineering Design Complete
- Oct 31, 2023 - Solicit Bids and Award Contract
- Dec 1, 2024 – Complete Construction of Phase 1A
- Jan 1, 2025 – Startup and Commissioning, Optimization, Achieve Compliance

Potential Phase 2 Improvements (circa 2035)



- Permit Compliance
 - Reg 31 TN Limit for Receiving Stream
 - 2.01 mg-N/L of TN (no dilution available at point of discharge)
 - LOT with 2nd Stage Nitrate Removal ~ 4.0 mg-N/L...may not be able to comply
 - Reg 31 TP Limit for Receiving Stream
 - 0.17 mg-P/L of TP
 - LOT with 2nd Stage TP Removal ~ 0.05 mg-P/L...will be able to comply
 - Potentially tighter ammonia limit (plant will likely be able to comply)
- Other Potential Improvements
 - Increase BOD load treatment capacity
 - Replace UV disinfection equipment
 - Replace centrifuge sludge dewatering equipment
 - Replace other equipment at end of useful life:
 - Aeration equipment for ASHT/digesters
 - Existing sludge and scum collection
 - Instrumentation and control/SCADA system



Questions?

**Public Meeting: Pagosa Area Water &
Sanitation District, Vista WWTP
Phase 1 Permit Compliance and Energy
Efficiency Improvements**

Preliminary Phase 1 Process Flow Diagram



B:\2021\11-15-21 PM - P132564\2021-24-641-2\061\CAO\COM\PT\U\FIG-1.DWG - KRAMER, KELLY

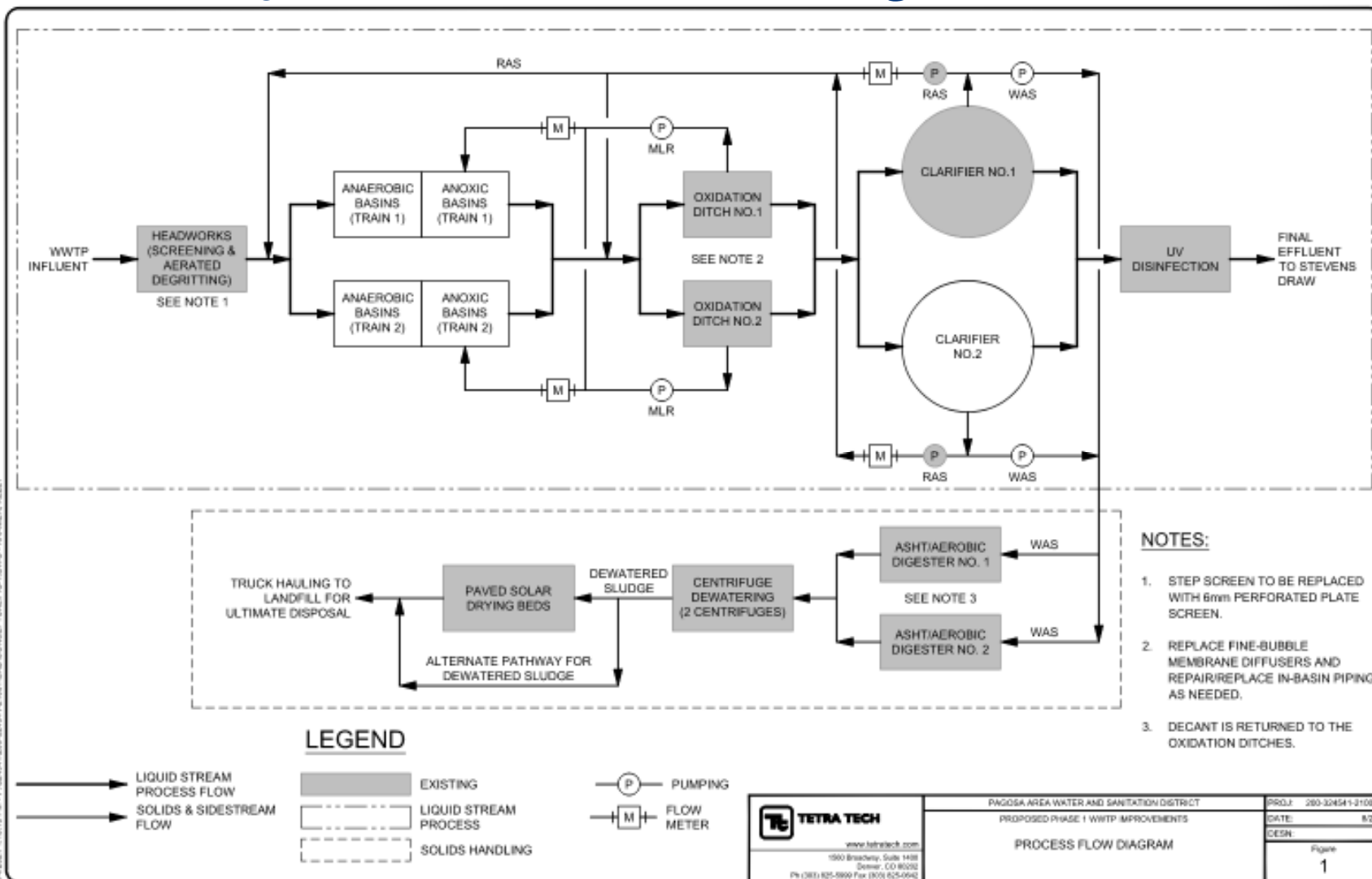



Exhibit B



San Juan Headwaters Forest Health Partnership

Bringing stakeholders together to
prioritize, plan, apply, and monitor
work in our forests and watersheds
for over 10 years



The SJHFHP . . .

- Addresses forest and watershed challenges in the San Juan Mountains using the best-available and relevant science
- Builds strong relationships between agencies, our community, industry, and individuals
- Considers landscape dynamics at appropriate scales
- Supports and facilitates collaborative, multi-stakeholder planning and work on the ground
- Identifies values at risk and implements appropriate treatments in those areas with partners

2022 SJHFHP Activities

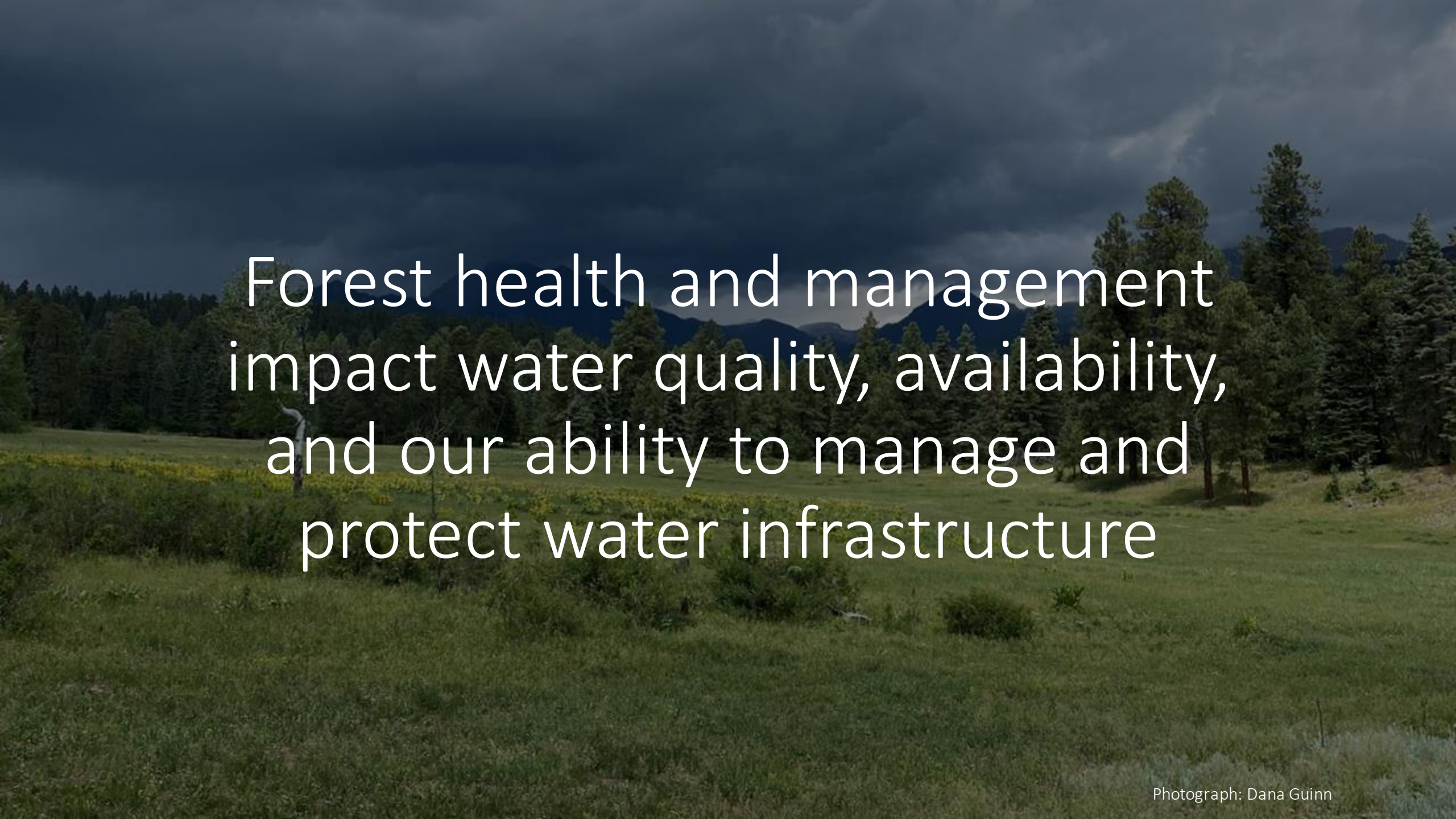


- Monthly meetings
- Plumtaw Fire Tour
- Documentary film development about community forestry
- Forest and Fire Learning Series
- Weminuche Audubon Bird Monitoring
- Highlighted and elevated stakeholder perspectives on Jackson Mountain Management and created a Jackson Mountain Virtual Tour
- Snowtography network expansion proposal and planning
- Engaged with local, state, and regional officials about forest management resources and policy
- Improved public outreach through updates to the SJHFHP website and newsletter
- Inclusion of local concerns, challenges, and interests in the 2-3-2 Cohesive Strategy Partnership, Rio Chama CFLRP and Southwest CO CFLRP

Photographs: Dana Guinn

Who we work with



A landscape photograph showing a green grassy field in the foreground, a dense forest of evergreen trees in the middle ground, and distant mountains under a dark, cloudy sky. The text is overlaid in the center of the image.

Forest health and management
impact water quality, availability,
and our ability to manage and
protect water infrastructure

The SJHFHP considers natural and engineered watersheds when planning and prioritizing work

- We acknowledge values at risk, and work to mitigate that risk to critical water infrastructure
- We're incorporating feedback, mobilizing partners, and completing work on the ground across boundaries



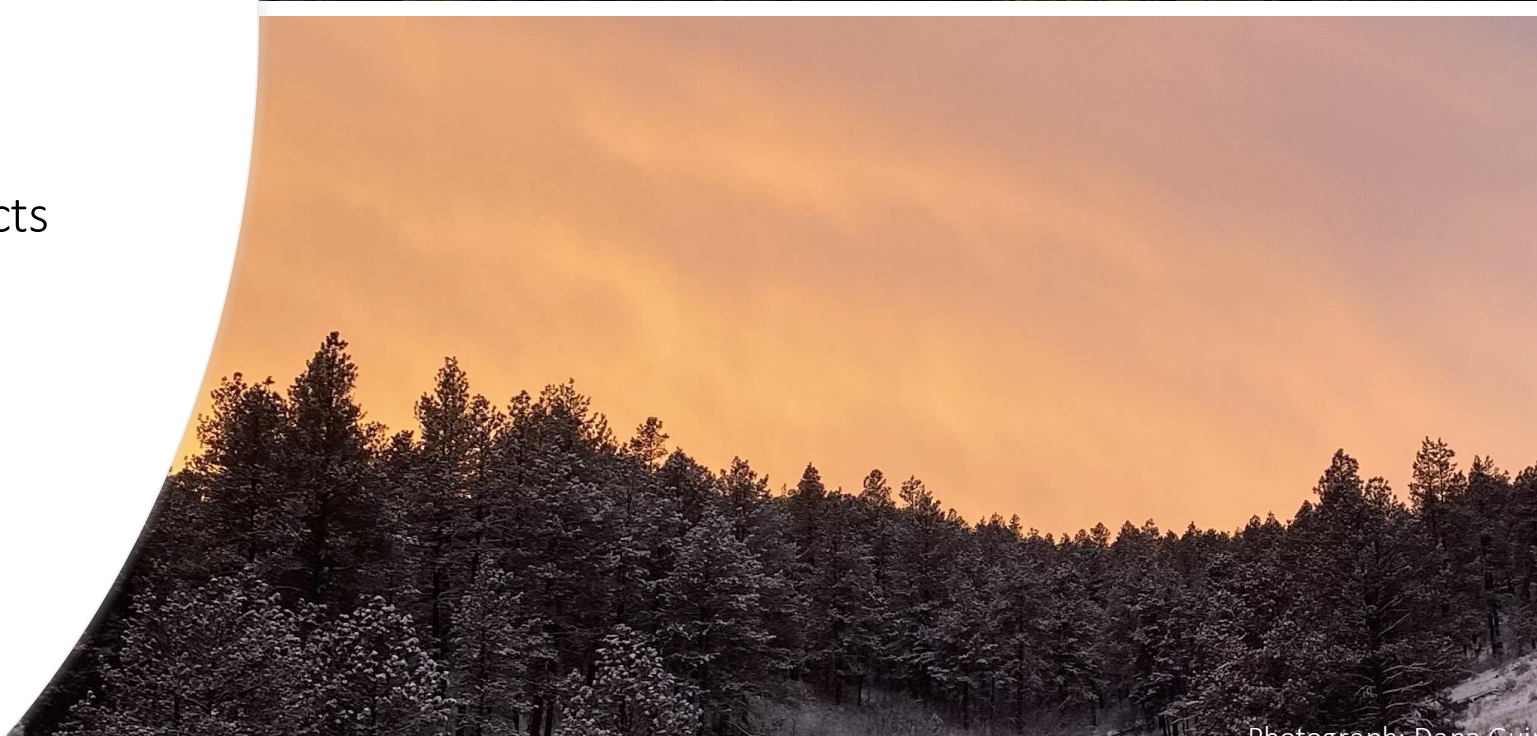
Actions that protect watersheds, water delivery infrastructure, and help ensure quality water supply

Disturbances including wildfire, insects, disease, and more can impact natural and engineered water delivery systems and infrastructure

The SJHFHP prioritizes protection of water resources by designing and pursuing projects that reduce potential disturbance impacts and mitigation costs while improving the resiliency of these systems



Photograph: Priscilla Sherman



Photograph: Don C...



Thinning and Mastication work in the Four Mile Drainage

- Treatment increases accessibility for pre-fire maintenance and post-fire repair
- Prioritized and completed as a direct result of a tour with PAWSD personnel
- Continued clean water access for the community
- Ongoing monitoring helps us understand effectiveness of treatments



Plumtaw Fire: the event

- 2022 was a dry spring with low RH, fuel moisture and an ongoing fire deficit across Southwest Colorado
- The Plumtaw Fire started on May 17th, 7 miles north of Pagosa Springs and quickly became a wind driven crown fire
 - PAWSD Infrastructure in this drainage
- Heavy initial attack
- Fire started within a potential operational delineation (POD), a unit used to contain fire using natural and artificial landscape features
 - **Eastern POD boundary: the Fourmile road, where Headwaters planned and completed thinning and mastication work in 2021!**
 - Used this eastern POD boundary as a control line, conducted backburn operations
 - Prior management and fuel break increased safety and decision space



Photograph: Lorena Williams USFS



Photograph: Dana Guinn

Plumtaw Fire Lessons Learned:

- Fire events are complex! Weather, fuel conditions, forest treatment, previous management, climate, and people all play a role in fire behavior and outcomes
- Needs and values of communities can be considered alongside forest ecosystem dynamics
- Pre-planning and managing for anticipated fire can increase decision space during a forest disturbance event, and create opportunities for more desirable post fire outcomes
- The mixed conifer and ponderosa pine forests that make up our watershed are fire adapted



Local investment amplifies local voice, and attracts additional funding

From the Southwest Colorado CFLRP:

- “Major reservoirs and water infrastructure lie within the Focus Area that are vital to both local communities and downstream users”
- “Watershed and forest conditions are inextricably linked across the focus area ... facilitating a shift towards desired conditions through forest restoration will impact water quality effects and improve watershed-scale resilience.”

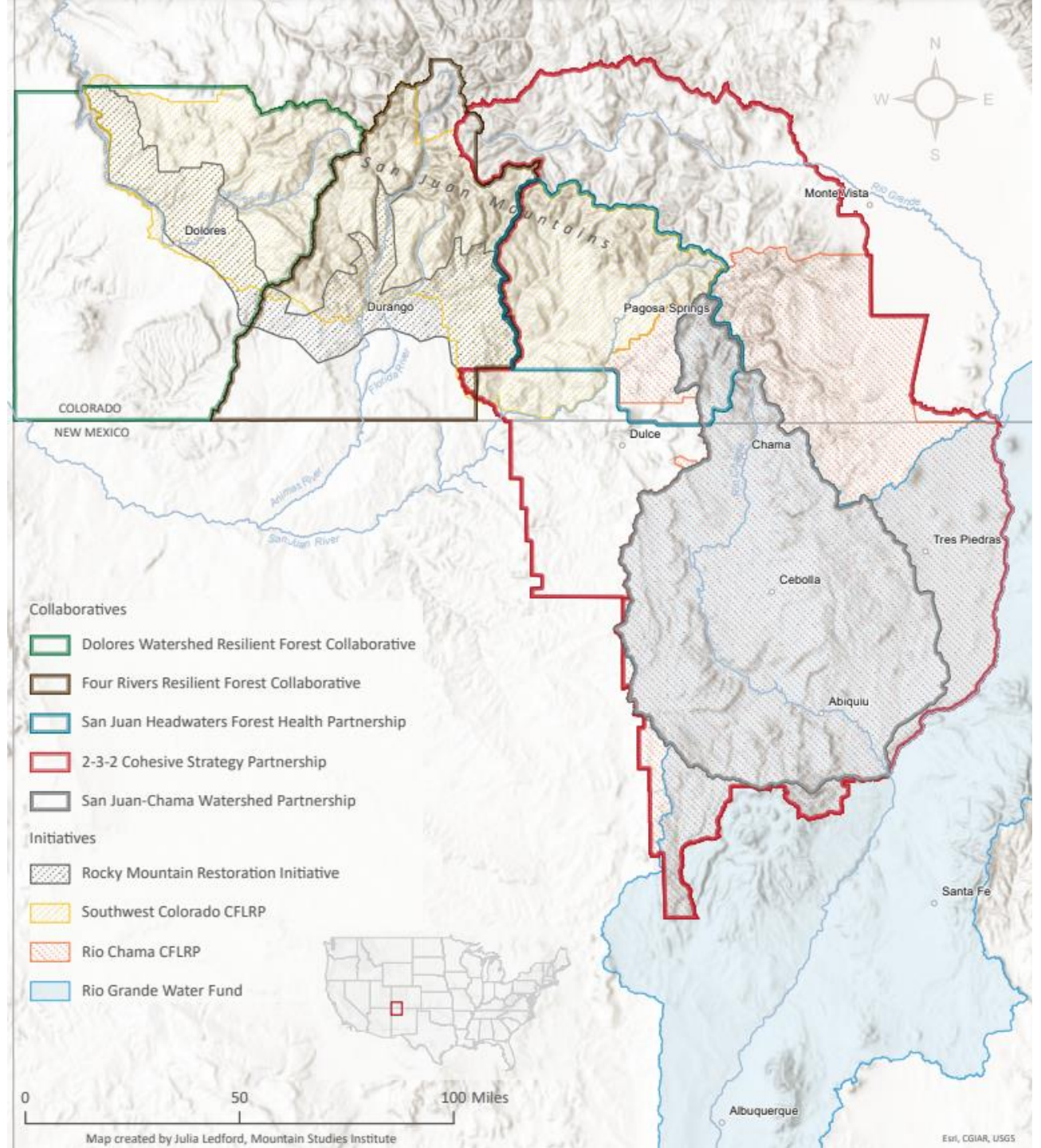
From the Rio Chama CFLRP:

- “Project area contains the headwaters of the Chama, Rio Grande, and San Juan Rivers, critical drainages that supply the life blood of the arid Southwest.”
- “Watershed function is expected to be greatly improved by proposed treatments as restoration activities will improve forest watershed conditions and riparian systems. Watersheds will be less susceptible to large, high-intensity wildfires causing severe floods and mass movement of soil and ash into stream channels.”



Photograph: Dana Guinn

Collaboratives are key to implementation



Our continued working partnership with PAWSD is valuable to us and to the community!

With your support the SJHFHP will continue to facilitate conversations about resilient communities, healthy forests, healthy watersheds and well maintained, accessible water infrastructure.

In 2023, we plan to:

- Explore the impacts of forest management activities on snowpack through snowtopography
- Plan and host a panel about the impacts of forest management on local water quality and quantity
- Host a community event about shared forest stewardship responsibility
- Increase community awareness through intensified communication efforts (newsletter, paper, partnerships)
- Partner to complete private lands treatments in priority locations



Photograph: Dana Guinn

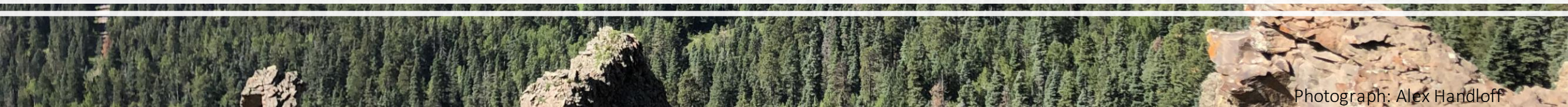
The SJHFHP welcomes voices new and old in its mission to inform and carry out best forest management practices.

- Meetings the **third Friday** of every month from 9 – 11am
 - Tour and education opportunities
 - Community partnerships
- Science driven land management projects and monitoring activities
 - Check out sanjuanheadwaters.org
 - Sign up to receive our bi-monthly newsletter
- Contact Dana Guinn: dana@mountainstudies.org





Thank You



Photograph: Alex Handloff

RECORD OF PROCEEDINGS
PAGOSA AREA WATER AND SANITATION DISTRICT
February 9, 2023 REGULAR MEETING

Call to Order

The Regular Board Meeting for the Pagosa Area Water and Sanitation District (PAWSD) was called to order by Chairman Smith at 5:01p.m.

Attendance

The following Directors were present: Jim Smith, Glenn Walsh, Bill Hudson, Peter Hurley, and Gene Tautges.

In attendance from staff: Justin Ramsey, Aaron Burns, and Cyndi Foster. Also present: Alan Pfister and Joe Tedder from the San Juan Water Conservancy District, Renee Lewis, Guadalupe Olivares, and Josh Pike.

Public Comment

There was no public comment.

Consideration of Resolution 2023-03 Authorizing Submittal of a Ballot Issue at the May 2, 2023

Regular Election

Justin Ramsey explained Resolution 2023-03 is a resolution that was on the ballot for last year's election. It is not applicable to this year's election and should be removed from the ballot. Director Walsh stated that PAWSD could do a different ballot question in November 2024 for the future election which would allow time to educate the community on the new ballot question. Renee Lewis stated she would follow up with the county clerk and recorder to see what the cost would be to run a new ballot question in November 2024. A motion was made by Director Hurley to remove Resolution 2023-03 from the ballot and seconded by Director Walsh. The motion was passed unanimously.

Consideration of Amending Resolution 2020-03

Director Hurley recused himself for the discussion and vote due to conflict of interest. Justin Ramsey explained that PAWSD has been charging a monthly affordable housing surcharge for new projects that qualify based on an AMI percentage. Mr. Ramsey stated the projects that have come to the PAWSD board asking to be considered for an affordable housing discount have all had their unique variables that PAWSD has had to consider individually which has created more work for PAWSD staff. Director Hudson suggested PAWSD request all properties that fall under the affordable housing discount submit an annual form stating that they are still adhering to the affordable housing guidelines signed by the property owner and if for some reason PAWSD suspected fraud, that PAWSD staff would research into it at that time only. Justin Ramsey stated that PAWSD should not have to be responsible for having to research properties to make sure they are abiding by the affordable housing guidelines. Director Smith stated that he does not think Resolution 2020-03 follows the PAWSD mission statement and that PAWSD is not in the affordable housing business. Director Smith also stated that PAWSD has just increased rates and the PAWSD Board just approved a new rate study to be conducted which will likely increase rates even more. Director Smith stated that PAWSD is also facing two massive unfunded, state mandated projects which are the Snowball Water Treatment Plant and the rebuilding of the Vista Wastewater Treatment Plant. Director Smith said that he thinks the PAWSD Board should be more concerned with providing affordable housing options to current and future employees rather than

48 helping developers save a few dollars by reducing their connection fees. Director Smith made a motion
49 that the PAWSD Board rescind Resolution 2020-03. Director Tautges seconded the motion asking to
50 discuss the matter further. Director Walsh stated that he likes the idea of amending the resolution to
51 allow the affordable housing funds to be used specifically for PAWSD current and future employees as
52 well as those projects that qualify as written in Resolution 2020-03. Director Tautges stated he agrees
53 that PAWSD should use the affordable housing funds for PAWSD current and future employees. Aaron
54 Burns stated he would need to research to see if this would be possible since it is not currently defined
55 to include PAWSD employees. A motion was made by Director Tautges to table Resolution 2020-03 until
56 modifications are made and seconded by Director Walsh. The motion passed unanimously.

57 58 **Discussion of PAWSD Future Water Demand**

59 Director Hudson discussed that based on the projections in the Wilson Water Group Study, the San Juan
60 Water Conservancy District has adopted a goal of an 11,00-acre feet reservoir. Director Hudson stated
61 that he doesn't see any evidence in this report to support an 11,000-acre feet reservoir. Director Walsh
62 stated that he thinks an 11,000-acre feet reservoir is an impractical size because of how much it will
63 cost. Director Walsh also stated that he would like to see the SJWCD use PAWSD actual projected
64 numbers in their report instead of using inflated projections. Director Tautges agreed that the SJWCD
65 needs to use the numbers PAWSD has provided instead of inflated estimates. Director Smith discussed
66 that the SJWCD is supposed to find the funds to build the dam and that the SJWCD has had roughly 15
67 years to do so and to this date has not found any money to fund the project. Director Smith verified with
68 Alan Pfister if that statement is correct, and Allan Pfister answered that Director Smith can state it that
69 way. Director Smith stated that he does not think PAWSD can endorse any reservoir size until the SJWCD
70 can come up with the funds to finance the project. Director Hurley stated that he thinks the SJWCD
71 needs to find financial partners to fund the project before this is discussed any further. Joe Tedder from
72 the SJWCD stated the SJWCD agrees to use the numbers provided to them by PAWSD in all reports and
73 calculations on the municipal side going forward. Justin Ramsey stated that PAWSD cannot afford to
74 help fund the reservoir. Director Walsh explained that he thinks PAWSD may need to go back to the
75 state once the 10-year planning period has been reached to reevaluate and to find out if the debt on the
76 Running Iron Ranch property can be restructured to spread out over a longer period of time, so the
77 payment is lower. The PAWSD board decided a joint meeting with the SJWCD will be scheduled to
78 discuss future projects between the PAWSD Board and the SJWCD Board. There was no further
79 discussion.

80 81 **Consideration of Adopting the 20 Year Capital Investment Plan**

82 Justin Ramsey presented the 20-Year Capital Investment Plan. Mr. Ramsey explained that the 20-Year
83 Capital Investment Plan is divided into different sections in the report. Mr. Ramsey asked the ORCs to
84 provide him with a list of what they think will need over the next 20 years. The data received from the
85 ORCs is formulated into the 20-Year Capital Investment Plan. Justin Ramsey said the data in the 20-Year
86 Capital Investment Plan is calculated in "today's" dollars and does not include inflation because the new
87 rate study is going to include inflation. Director Walsh asked who is responsible for fire hydrant
88 maintenance. Mr. Ramsey answered that PAWSD is responsible for the maintenance of the hydrants,
89 but the developer is responsible for the installation. Director Walsh suggested the water fee and CIF
90 ratio on table 6-water mains be changed to 70%/30% instead of 95%/5%. Justin Ramsey stated that he
91 agrees, 70%/30% is a better representation. Director Walsh stated that he thinks it's easiest to view the
92 20-Year Capital Investment Plan in five categories; 1. Pure maintenance, 2. Pure replacement, 3.
93 Replacement with upgrade, 4. New growth that also benefits existing, and 5. Pure new growth. Director
94 Tautges stated that pure replacement doesn't only benefit existing, it also benefits new growth as well.
95 Director Hudson agreed with Director Tautges. Justin Ramsey asked if all categories excluding pure

96 maintenance should include a CIF component. The PAWSD board all agreed, all categories excluding
97 pure maintenance should include a CIP component. Justin Ramsey stated that the PRVs should also have
98 a CIF component and that PAWSD will need two new pump stations in the future. Director Hudson
99 stated that the pump stations are not raw water so it should be changed to CIF instead. Director Walsh
100 suggested the plan to move the Trails fill station be removed and replaced with running iron workforce
101 housing. The PAWSD board all agreed. Mr. Ramsey stated that he will make all requested revisions to
102 the 20-Year Capital Investment Plan and present it to the board for approval at the next board meeting.
103 There was no further discussion.

104 105 **Consideration of Stantec Rate Study Agreement**

106 Aaron Burns explained that PAWSD has selected Stantec to conduct the new rate study. Stantec
107 conducted the PAWSD rate study in 2018 and will be able to utilize the data from that study in the new
108 rate study. Stantec is proposing a two-phase study for PAWSD. Phase one will be expedited to focus on
109 rates only and phase two will be a longer process to allow Stantec to look over various PAWSD fees and
110 provide some alternative rate modeling. Phase one will cost approximately \$33,600 and phase two
111 approximately \$20,700. The total for the new rate study through Stantec is \$54,300. Director Hudson
112 made a motion to approve the Stantec proposal as presented and seconded by Director Hurley.

113 114 **Manager Talking Points**

115 Justin Ramsey stated that regarding the cost of the PAWSD payroll department's processing fee for
116 FAMILI insurance, the cost would be \$3 per pay cycle. Mr. Ramsey also said he does not think PAWSD
117 should get involved in this process. Regarding PAWSD water loss, Justin Ramsey stated the water loss is
118 increasing and at a high of approximately 534 gallons per minute. Mr. Ramsey explained that he
119 suspects water leaks and older meters misreporting are the main cause of this increase. Mr. Ramsey
120 stated that PAWSD has been looking for a company that can use a drone with specific leak detecting
121 software to find the leaks but has not found a reliable company yet.

122 123 **Any other Business Brought before the Board will be Duly Considered**

124 There being no other business brought before the board, a motion was made by Director Tautges to
125 adjourn the meeting at 7:30 p.m. and seconded by Director Hurley. The motion passed unanimously.

126
127
128 Respectfully submitted,

129
130
131
132 Bill Hudson
133 Secretary
134

Staff Summary Sheet

	To	Action	Signature, Date		To	Action	Signature, Date
1	Justin Ramsey	Review		6			
2	Board	Review		7			
3				8			
4				9			
5				10			

Name of Action Official:

Cyndi Foster

Phone:

Board Meeting Date:

03/09/2023

Priority

☐ **High**

☐ **Medium**

☐ **Low**

Subject: Request to waive fees for Archuleta County

Archuleta County has taken ownership of many delinquent properties through Treasurer's Deed transactions. In these situations, PAWSD must write off all fees up to the date of the transaction. After ownership has been transferred to the County and fees written off, PAWSD continues to bill either monthly or quarterly fees depending on the account. Archuleta County has requested PAWSD write off any fees accrued since the transaction and discontinue billing on 35 accounts that are now in their possession. Email and letter correspondence attached.

Cyndi Foster

From: Justin O. Ramsey
Sent: Thursday, February 16, 2023 3:49 PM
To: Mary Helminski; Aaron Burns
Cc: Cyndi Foster
Subject: RE: Fee Waiver Request
Attachments: 20230216023930.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Hey Mary

I will bring this request to the board, but please keep in mind, these fees, when not paid by the property owner, are passed onto all PAWSD customers which are also Archuleta County tax payers. So if these fees are waived we are simply transferring the "burden" to PAWSD rate payers and Archuleta County tax payers. Also please keep in mind PAWSD has already waived over two million dollars in fees for these properties which is being placed directly on the PAWSD rate payer.

Cyndi please add this to next month agenda, and look into the invoice issue.

thanks

Justin Ramsey PE | District Engineer/Manager
Pagosa Area Water & Sanitation District
100 Lyn Ave
Pagosa Springs, CO 81147
Office: (970) 731-7641 | Mobile: (928) 606-3598

From: Mary Helminski <mHelminski@archuletacounty.org>
Sent: Thursday, February 16, 2023 2:42 PM
To: Justin O. Ramsey <justin@PAWSD.org>; Aaron Burns <Aaron@PAWSD.org>
Subject: Fee Waiver Request

!!!WARNING!!! This message originated outside the organization. Consider whether it is legitimate before responding, opening attachments or activating links.

Hi,

Please see the attached letter regarding a request for a waiver of fees.

Thank you for your consideration,

Mary Helminski
Paralegal/Executive Assistant
Archuleta County



**Archuleta County
Office of the County Attorney**

398 Lewis Street ♦ P. O. Box 1507 ♦ Pagosa Springs, Colorado 81147 ♦ 970-264-8321

February 16, 2023

Via Email to Justin@PAWSD.org

Mr. Justin Ramsey
Pagosa Area Water & Sanitation District
100 Lyn Avenue
Pagosa Springs, CO 81147

Via Email to Aaron@PAWSD.org

Mr. Aaron Burns
Pagosa Area Water & Sanitation District
100 Lyn Avenue
Pagosa Springs, CO 81147

Re: Fee Waiver Request

Dear Justin and Aaron,

As you might be aware, the county is in the process of obtaining clear title to many vacant parcels throughout Archuleta County so they can be auctioned off, with the hope that the buyers build homes on each parcel. We started this process with two test properties in 2021. Those two properties were successfully auctioned off and those buyers are now paying the taxes and (I believe) the water bills. We began Phases I, II, III and IV in 2022 and intend to have clear title to all 36 parcels ready to put to auction in May 2023.

We've received the PAWSD invoices for these properties and respectfully request that PAWSD waive these fees to the county. It would be a burden to the taxpayers of Archuleta County to be required to pay these water/sewer availability fees. I am confident that the parcels will all have successful bids during the second quarter and the transfer of ownership will occur by the end of the third quarter of 2023.

In addition, there are four parcels that we received multiple invoices for (145 Travelers Circle, 169 Travelers Circle, 220 Travelers Circle and 643 Trails Blvd.). Can you let me know why each parcel has three or four separate accounts with three or four separate invoices? If there are multiple water taps on each parcel, it would be important for us to know that when we put the parcels up for auction.

I've attached copies of all the invoices and look forward to your response. I can be reached at 970-264-8308 at your convenience.

Kind Regards,

A handwritten signature in blue ink that reads "Mary Helminski".

Mary Helminski
Executive Assistant

Staff Summary Sheet

	To	Action	Signature, Date		To	Action	Signature, Date
1	Justin Ramsey	Review		6			
2	Board	Review		7			
3				8			
4				9			
5				10			

Name of Action Official:

Cyndi Foster

Phone:

Board Meeting Date:

03/09/2023

Priority

☐ High

☐ Medium

☐ Low

Subject: Request to waive back availability fees for 251 Pebble Circle

The property owner at 251 Pebble Circle-Lot 1X Lake Hatcher Park has contacted Archuleta County to have the two lots that are currently Lot 1X be unconsolidated and become Lots 1XA and 3A. When lots are consolidated, PAWSD discontinues Availability Fee billing on one or more lots absorbed by the consolidation. These accounts remain in the system and are considered dormant until a lot unconsolidation is requested with Archuleta County. When lots are unconsolidated, PAWSD policy is to assess back availability fees retroactively to the date of the original lot consolidation. The property owner of 251 Pebble Circle is requesting the back availability fees be waived since she did not own the property when it was originally consolidated.



Archuleta County
Development Services
Building & Planning Departments
1122 Hwy 84
P. O. Box 1507
Pagosa Springs, Colorado 81147
970-264-1390
Fax 970-264-3338

w/wn 7001 (1962) (S)
7002 (1963) (D)
7003 (1964) (D)
Back Availability

LOT UN-CONSOLIDATION

► RECEIVED ◀

Date 2/3/2023

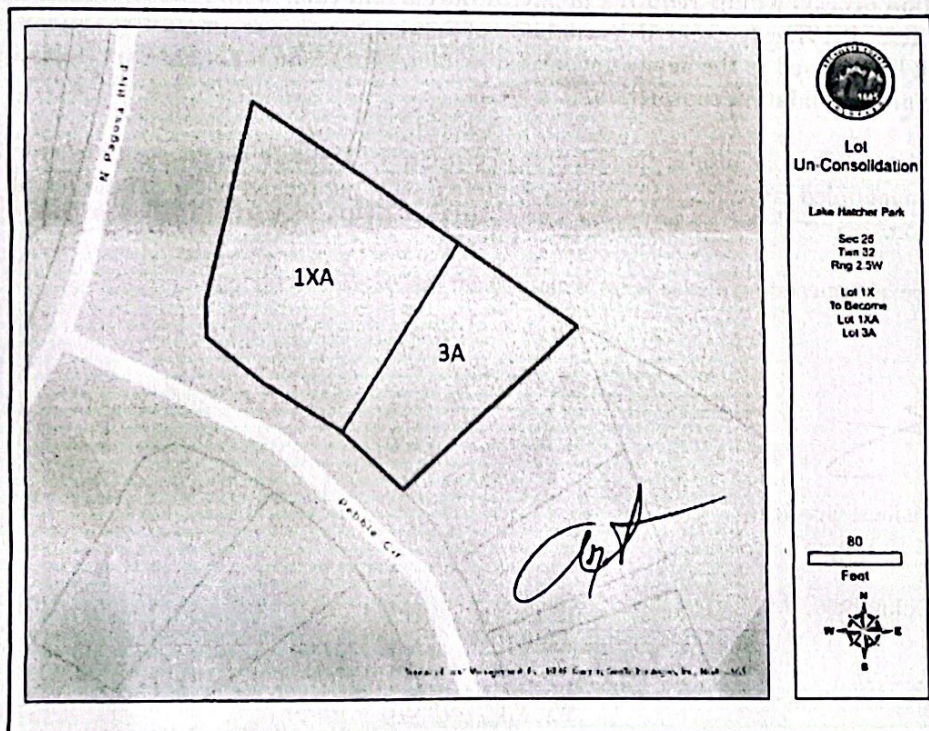
FEB 11 6 2023

Dear Utility Company/HOA/POA:

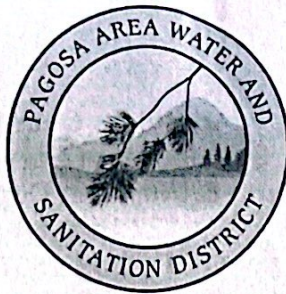
The owner of Lot 1X, in Lake Hatcher Park, is proposing by resolution, to un-consolidate the lot to become Two (2) lots, Lot 1XA and 3A. All covenants and restrictions will remain the same. Anyone who wishes to comment should contact the Archuleta County Planning Department, P.O. Box 1507, Pagosa Springs, Colorado 81147, and (970) 264-1385 prior to March 6, 2023.
(A minimum of 30 days from the date of mailing)

Sincerely,

Martine Colombey
Martine Colombey



James Smith, President/Chairman
Glen Walsh, Vice President
Bill Hudson, Secretary



Peter Hurley, Treasurer
Gene Tauges, Director

February 7, 2023

Archuleta County Planning Department
P.O. Box 1507
Pagosa Springs, CO 81147

Re: Lot Un-consolidation, Lot 1X in Lake Hatcher Park.

To Whom It May Concern:

The District has received a lot un-consolidation comments request regarding lot 1X in Lake Hatcher Park, also known as 251 Pebble Cir., and offers the following comments.

The proposed Lot 1X is currently being served by the district for both water and wastewater purposes and proposed Lot 3A is considered a 'dead' account since the District was made aware of the original consolidation. Lot 3A has not been assessed water and wastewater Availability charges since that time. Upon a successful un-consolidation process, lot 3A will be charged Availability of Service Fees for water and wastewater purposes retroactively to the original date of consolidation and going forward.

These properties are located within District boundaries for water service, and are therefore subject to the Rules, Regulations, and Construction Specifications of the District. The District assumes all existing easements will remain in effect. Please notify the District if this is not the case.

As mentioned above, any lots that were previously consolidated that subsequently go through the unconsolidation process will be required to pay, at the current rate, all previously excused Availability of Services Fees. Previously excused Availability of Service Fees in the amount of approximately \$9,755.20 will be assessed to the newly unconsolidated lot. That amount could vary depending upon the timing of the unconsolidation completion.

There will be a \$100 Lot Unconsolidation Mapping Fee assessed to the newly unconsolidated lot. You will notice this amount billed on your statement the month following our receipt of the Resolution of Unconsolidation.

Should there be any questions, please feel free to contact the District's office.

Sincerely,

Aaron Burns
Director of Business Services

cc: Martine Colombey

100 Lyn Avenue
Pagosa Springs, CO 81147

www.pawsd.org

(970)731-2691
info@pawsd.org

Back Availability Assessment

Date: 02/07/23

Type of Service: Water and Wastewater both

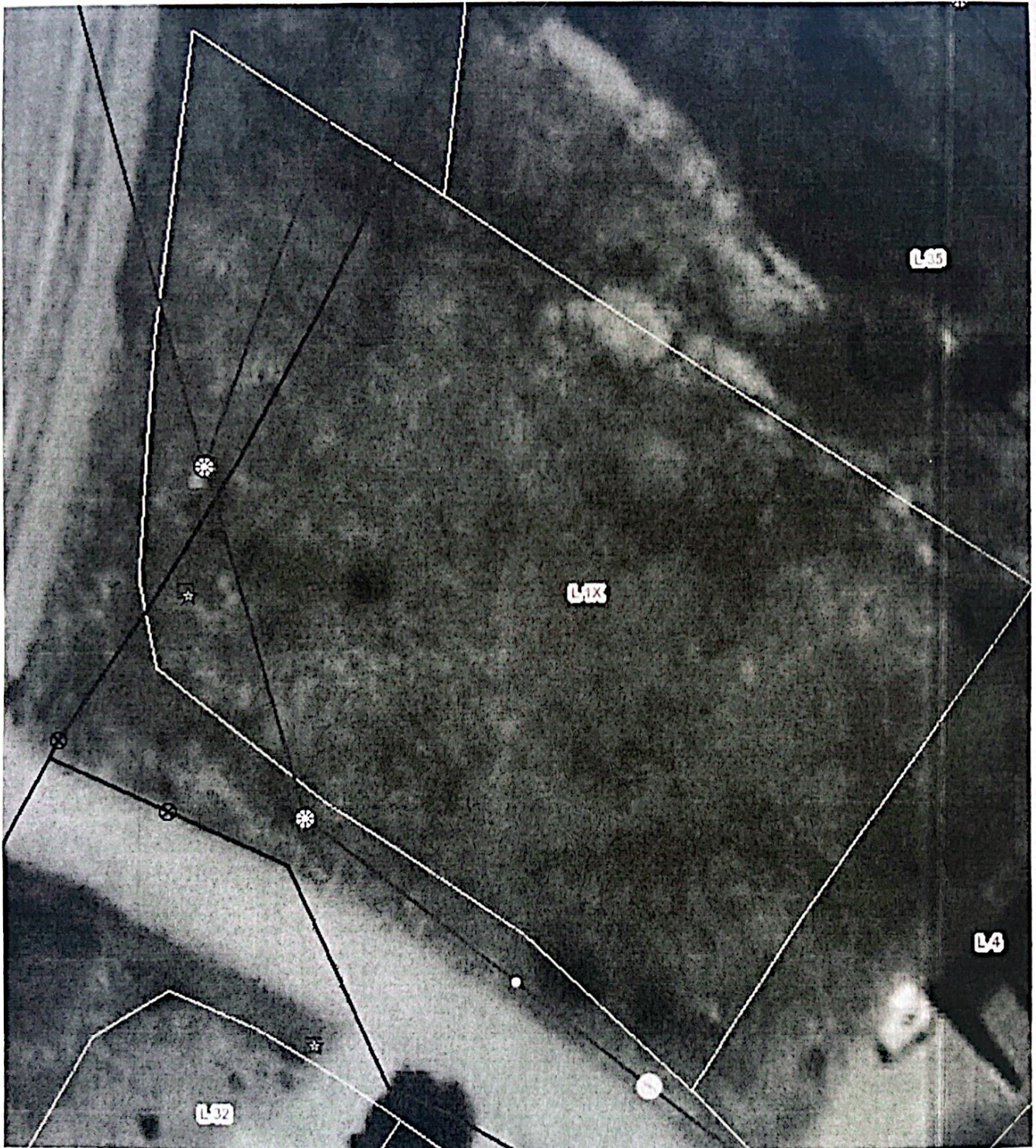
Acct #: 1964

Location #: 7003

"Start" Date: 12/15/1992

"Thru" Date: 03/31/2023

				Current Availability Assessments	
Year	# of Months	Monthly Assess.	Total Amount		Monthly
90	0	\$26.80	\$0.00	Water Only	\$14.30
91	0	\$26.80	\$0.00	Water & W/W	\$26.80
92	1	\$26.80	\$26.80		
93	12	\$26.80	\$321.60		
94	12	\$26.80	\$321.60		
95	12	\$26.80	\$321.60		
96	12	\$26.80	\$321.60		
97	12	\$26.80	\$321.60		
98	12	\$26.80	\$321.60		
99	12	\$26.80	\$321.60		
0	12	\$26.80	\$321.60		
1	12	\$26.80	\$321.60		
2	12	\$26.80	\$321.60		
3	12	\$26.80	\$321.60		
4	12	\$26.80	\$321.60		
5	12	\$26.80	\$321.60		
6	12	\$26.80	\$321.60		
7	12	\$26.80	\$321.60		
8	12	\$26.80	\$321.60		
9	12	\$26.80	\$321.60		
10	12	\$26.80	\$321.60		
11	12	\$26.80	\$321.60		
12	12	\$26.80	\$321.60		
13	12	\$26.80	\$321.60		
14	12	\$26.80	\$321.60		
15	12	\$26.80	\$321.60		
16	12	\$26.80	\$321.60		
17	12	\$26.80	\$321.60		
18	12	\$26.80	\$321.60		
19	12	\$26.80	\$321.60		
20	12	\$26.80	\$321.60		
21	12	\$26.80	\$321.60		
22	12	\$26.80	\$321.60		
23	3	\$26.80	\$80.40		
		Total:	\$9,755.20		



Monday, February 6, 2023 2:33:49 PM - Window

PAGOSA AREA WATER AND SANITATION DISTRICT

**RESOLUTION REGARDING USE OF AFFORDABLE HOUSING WATER AND
WASTEWATER SURCHARGES**

Resolution 2023-04 (the “Resolution”)

WHEREAS, the Pagosa Area Water and Sanitation District (“District”) is a quasi-municipal corporation and political subdivision of the State of Colorado and a duly organized and existing special district pursuant to Title 32, Colorado Revised Statutes; and

WHEREAS, Section 32-1-1001(1)(h), C.R.S. authorizes the District’s Board of Directors (the “Board”) to have the management, control and supervision of all the business and affairs of the special district and all construction, installation, operation and maintenance of special district improvements; and

WHEREAS, Section 32-1-1001(1)(m), C.R.S. authorizes the Board to adopt, amend and enforce bylaws, rules and regulations for carrying out the business, objects and affairs of the Board and District; and

WHEREAS, Section 32-1-1001(1)(j)(I), C.R.S. authorizes the Board to fix and from time to time increase or decrease fees, rates, tolls, penalties, or charges for services, programs and facilities furnished by the District; and

WHEREAS, Section 32-1-1001(1)(j)(II), C.R.S. authorizes the Board to waiver or amortize all or part of the tap fees and connection fees or extend the time period for paying all or part of such fees for property within the District in order to facilitate the construction, ownership, and operation of affordable housing on such property, as such affordable housing is defined by resolution adopted by the Board; and

WHEREAS, pursuant to the authority set forth in Section 32-1-1001(1)(j)(II), C.R.S., the Board, on March 12, 2020, passed Resolution 2020-03 providing for a full or partial waiver of the Capital Investment Fee and the Raw Water Acquisition Fees for Very Low-Income Housing, Low-Income Housing, and Moderate-Income Housing (a/k/a Workforce Housing) in certain circumstances, and as more particularly set forth and defined in said resolution; and

WHEREAS, to offset the loss of revenue resulting from the implementation of Resolution 2020-03, the Board, at its May 14, 2020 Regular Meeting, adopted a water (the “Water Surcharge”) and wastewater surcharge (the “Wastewater Surcharge” and together with the Water Surcharge collectively the “Surcharges”) after a properly noticed public meeting; and

WHEREAS, the Surcharges are recalculated each year such that the current Water Surcharge is \$0.77 per month per Equivalent Unit (as defined in the District’s Rules and Regulations), and the Wastewater Surcharge is \$0.24 per month per Equivalent Unit (as defined in the District’s Rules and Regulations); and

WHEREAS, the Board desires to continue encouraging the development of Very Low-Income Housing, Low-Income Housing, and Moderate-Income Housing (a/k/a Workforce Housing) to address the ongoing shortage of available housing units within the District, including for the District's own employees; and

WHEREAS, the Board desires to clarify and expand the purposes for which the Surcharges can and will be used by the District.

NOW THEREFORE, be it resolved by the Board of Directors of the Pagosa Area Water and Sanitation District, that its water Capital Investment Fee and Raw Water Acquisition Fee calculation methodology and fee payment methodology is amended, clarified and shall be implemented, as follows:

1. The District can use the Surcharges for any or all of the following purposes:
 - a. The Surcharges may continue to be used to offset full or partial waivers of the Capital Investment Fee and the Raw Water Acquisition Fee resulting from the implementation of Resolution 2020-03 in order to promote, facilitate, and assist the development of Very Low-Income Housing, Low-Income Housing, and Moderate-Income Housing (a/k/a Workforce Housing) as more particularly set forth and defined in Resolution 2020-03.
 - b. The Surcharges may also be used to plan, design, develop, permit, and build Very Low-Income Housing, Low-Income Housing, or Moderate-Income Housing (a/k/a Workforce Housing) (all as defined in Resolution 2020-03) on property owned by the District or others.
 - c. The Surcharges may also be used to provide a housing stipend for employees of the District residing in households earning less than the Area Median Income ("AMI"), defined as the median household income for Archuleta County, as estimated by the most recent U.S. Census Small Area Income and Poverty Estimates ("AMI"). The District shall have discretion as to the amount of such stipend depending on the percentage of AMI earned by the employee's household.
2. APPLICABILITY. The intent of this Resolution is to keep all aspects of the District's existing fee policies intact, and to merely clarify and expand the purposes for which the Surcharges can and will be used by the District.
3. SEVERABILITY. If any section, subsection, paragraph, clause or provision of this Resolution shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, subsection, paragraph, clause or provision shall in no manner affect any remaining provisions of this Resolution, the intent being that the same are severable.
4. REPEALER. All orders, resolutions, bylaws or regulations of the District, or parts thereof, inconsistent with this Resolution are hereby repealed to the extent only of such

inconsistency.

5. EFFECTIVE DATE. This Resolution shall be enforced as effective on, and as of, _____, 2023.

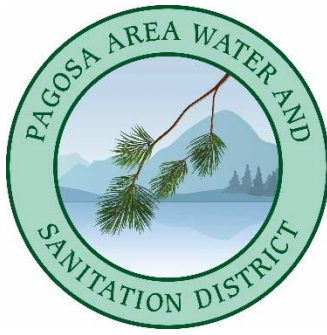
ADOPTED this ____ day of _____, 2023, by a vote of ____ in favor and ____ opposed.

Jim Smith, President

(SEAL)

Attest:

Bill Hudson, Secretary



CAPITAL IMPROVEMENT PLAN

2023-2042

Prepared for:

*Pagosa Area Water and Sanitation District
Board of Directors*

January 2, 2023



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Appendix E.	Snowball Water Treatment System
Appendix F.	Collection System
Appendix G.	Vista Wastewater Treatment Plant
Appendix H.	Vehicles and Equipment
Appendix I.	Rate Allocations

I. BOARD OF DIRECTORS

- | | |
|----------------|--------------------|
| • Jim Smith | President/Chairman |
| • Glenn Walsh | Vice President |
| • Bill Hudson | Secretary |
| • Peter Hurley | Treasurer |
| • Gene Tautges | Director |

2. KEY STAFF

- | | |
|-------------------|----------------------------------|
| • Aaron Burns | Director of Business Services |
| • Andrew Connor | Water Treatment ORC |
| • Art Holloman | RAW Water Manager |
| • Craig Swick | Electric/Instrumentation Manager |
| • Garret Funk | Fleet Manager |
| • Harry Lynk | Collections ORC |
| • Joe Hewett | Wastewater Treatment ORC |
| • Justin Ramsey | District Manager/Engineer |
| • Kyle Tjelmeland | GIS/City Works Coordinator |
| • Shaun Wilkins | Distribution ORC |

3. BACKGROUND

The Pagosa Area Water and Sanitation District (District) provides safe, reliable, potable and non-potable water to its residential, commercial, and institutional customers located in and around the Town of Pagosa Springs Colorado. The District also provides safe and affordable wastewater collection and treatment.

The Pagosa Area Water and Sanitation District is the successor to the Pagosa Water and Sanitation District, which was formed in 1971. The original district was reorganized into the current district in 1977 to provide water and wastewater service to the Pagosa Springs, Colorado area, located in Archuleta County in the southwestern portion of the state. Through an inclusion election held in 1992, the Town of Pagosa Springs and areas served by the former Archuleta Water Company were included into the District's boundaries at that time for potable water service. In 2016 the District and Town of Pagosa Springs reached an agreement for the District to receive and treat the Town of Pagosa Springs wastewater. The town's collection system operation remains the responsibility of the Pagosa Springs Special Improvement District.

Thirty five full time District personnel manage and operate three water diversions, 21 miles of raw water line, approximately 300 miles of water line, 80 miles of sewer line, three water treatment plants and one wastewater treatment plant. The District also manages seven reservoirs, five in conjunction with the Pagosa Lakes Property Owners Association (PLPOA) providing 4,070 acre-feet of usable raw water storage. The District encompasses approximately 76 square miles. The district provides over 1,225 acre-feet of potable water and an additional 300 acre feet of raw water for irrigation. It should be noted the District produces approximately 2,055 acre feet with the difference being water lost through leaks in the distribution system, process water, meter inaccuracies and water theft.

The District serves approximately 8,300 equivalent units (EU's) via 6,330 connections. The District predominantly serves residential, and resort related commercial properties. The District water service includes all potable water delivered through the treatment and distribution system for domestic and commercial uses including residences, hotels, restaurants, shops and other commercial enterprises. The District also operates and maintains three fill stations allowing properties outside of the District boundaries the ability to purchase and use District potable water.

The District has 4,855 wastewater EU's with 3,622 number of sewer connections (this does not include individual connections from the Pagosa Springs Sanitation General Improvement District (PSSGID) and treats approximately 460 million gallons (1,412 af) of wastewater through its Vista Wastewater Treatment Plant.

4. CAPITAL IMPROVEMENT PLAN DISCLAIMER

The Capital Improvement Plan (CIP) for the District is based on needs determined by the department heads. This group meets on a regular basis to prioritize capital needs of the District.

Analysis is done to determine future needs for replacing water and sewer mains in the system as well as expansion and/or replacement of water and wastewater treatment facilities. Replacement of aging water and sewer infrastructure is a national and local concern. Deterioration of existing water and sewer infrastructure, poor installation practices and inferior materials represent crucial challenges for the District.

Prioritization is based on asset life cycles, regulatory requirements, maintenance requirements and system deficiencies. Future important considerations are Board goals and objectives, Community development, service boundary growth potential, anticipated infill growth and funding availability.

Project costs are not engineered estimates. The figures shown are Rough Order-of-Magnitude (ROM) estimate of costs before all the project requirements have been specified. The ROM Estimate is based on preliminary scope of work that is subject to change.

Many items in this plan can be considered maintenance costs as opposed to Capital Improvement Costs. The maintenance items listed in this report are for replacement of existing capital items that exceed previous maintenance tasks and thus will not have been captured in past maintenance budgets.

5. RAW WATER

The current raw water system consists of three primary diversions and associated infrastructure along with seven reservoirs, two pump stations, and monitoring stations for a state required Augmentation Plan.

5.1. WEST FORK DIVERSION

The West Fork Diversion is located off Highway 160 near mile marker 155. West Fork of the San Juan water is diverted into a pipeline that travels only a short distance downstream where it exits into a small detention pond and then enters a second diversion. This diversion goes into an approximately eight-mile gravity pipeline to a small reservoir at the Snowball Water Treatment Plant.

The diversions is in good condition but concrete deterioration will require capital expenditures over the next twenty years. The pipeline was installed in 1968 ongoing maintenance is required to keep water flowing dependably to the Snowball water treatment plant. Repair of pipeline will include short areas of replacement along with replacement of a combination air relief valves and valves.

Table I – West Fork Diversion

Construction Costs	Number	Total Cost	Rate	CIF	RWAF
Diversion	LS	\$205,000	80%	10%	10%
Water Line	5 MI	\$2,000,000	50%	25%	25%
Air/Relief Valves	8 EA	\$9,450	100%	0%	0%
Valves	8 EA	\$16,500	100%	0%	0%

5.2. FOUR MILE DIVERSION

The Four Mile Diversion is located off County Road 400 along Four Mile Creek. The water is diverted into the Dutton pipeline that replaced the Dutton Ditch in 2004. The Dutton pipeline is a gravity pipeline that runs for approximately six miles and delivers water to Hatcher Reservoir or Stevens Reservoir.

Water from the Dutton pipeline can be diverted into Dutton Creek in order to fill Stevens Reservoir. PAWSD is negotiating with the new owners of the Dutton Creek Ranch to construct a new pipeline from the existing Dutton pipeline to Stevens Reservoir. In addition to the pipeline a pump station at Stevens Reservoir would allow water to be pumped from Stevens Reservoir back up the new pipeline where it could be used to fill Hatcher Reservoir during times that water is not being diverted from Four Mile Creek.

Stevens Reservoir is first in a string of reservoirs within the distribution system. Water can be transferred from Stevens Reservoir through a combination of valves, pipes, gates and ditches into Pagosa Lake, which then can feed Village Reservoir which can then feed Lake Forest. The San Juan Water Treatment Plant can then treat water out of Lake Forest. To reduce water losses in the system all ditches will be converted to pipes, this reduces evaporation losses but more importantly losses through percolation.

Table 2 – Reservoir Ditch to Pipeline Replacement

Construction Costs	Number	Total Cost	Rate	CIF	RWAF
Diversion	LS	\$1.5 M	80%	10%	10%
Pipeline	7.0 MI	\$200,000	80%	10%	10%
Air Relief Valves	8	\$100,000	100%	0%	0%
Valves	5	\$150,000	100%	0%	0%
Stevens Reservoir Pipeline	2.5 MI	\$1,500,000	0%	0%	100%
Stevens Reservoir Pump Station	1	\$800,000	100%		

5.3. SAN JUAN DIVERSION

The San Juan Diversion is located approximately three miles south of Pagosa Springs. Water from the main stem of the San Juan River is diverted into a sedimentation pond where it is pumped approximately 2 miles via the San Juan Pumping Station to the Trujillo Road Pumping Station. The Trujillo Road Pumping Station pumps the water an additional 5.5 miles where the water can be discharged directly to the San Juan Water Treatment Plant, Village Lake or Lake Forest. Lake Forest has a pumping station to pump water into the San Juan Treatment Plant.

The diversion itself along with the pipelines are in good condition and no large capital expenditures are expected over the next twenty years. The diversion pond will need to be dredged and new baffles installed. The pumps, controls and VFD's at the San Juan and Trujillo Pump Stations will be

at the end of their expected operational life before the end of this CIP thus replacement of these items is expected.

The Lake Forest Pumping Station has two pumps suspended via buoys directly in Lake Forest making maintenance of the pumps difficult and expensive. Relocating the pumps to a shore mounted system will reduce operational costs.

Table 3 – San Juan Diversion

Construction Costs	Number	Total Cost	Rate	CIF	RWAF
San Juan Diversion Pond Dredging and baffle replacement	1 LS	\$440,000	100%	0%	0%
San Juan Pump Station Pumps Replacement	2 EA	\$200,000	100%	0%	0%
San Juan Controls and VFD Replacement	2 EA	\$100,000	100%	0%	0%
Trujillo Pump Station Pumps Replacement	3 EA	\$320,000	100%	0%	0%
Trujillo Controls and VFD Replacement	3 EA	\$150,000	100%	0%	0%
Relocation of Lake Forest Pump Station	LS	\$700,000	100%	0%	0%

5.4. AUGMENTATION PLAN

The state required augmentation plan consists of 5 monitoring stations located in the Stollsteimer Creek watershed. The augmentation plan is to provide assurances to the Ute Tribe that the construction of the reservoirs in the Stollsteimer watershed (Hatcher, Stevens, Pagosa, Village, Forest and Pinon) will not have a negative impact on the tribes Stollsteimer water rights.

Capital improvements on the augmentation plan infrastructure will be needed to maintain the weirs used to collect water data.

Currently data collected at the augmentation sites are uploaded to a satellite system for record keeping and reporting. This system has annual costs to a third party. Over the next two years these systems will be connected directly to the PAWSD SCADA System allowing to collect and record data without the third-party expenses.

Table 4 – Augmentation Infrastructure

Construction Costs	Number	Total Cost	RWAF
Monitoring Stations	1 LS	\$100,000	100%
Data Collection and Reporting	1 LS	\$40,000	100%

6. DISTRIBUTION SYSTEM

The District's distribution system is very complex due to its geographic size and terrain. The following table outlines the components of the distribution system.

The actual age of the distribution system varies significantly, as stated earlier the District began in 1971 meaning a portion of the distribution system is over fifty years old, however many of the water lines within the town limits may be substantially older than that. The age of the distribution system coupled with poor installation practices, inferior materials and harsh soil conditions has led to significant unaccounted water losses throughout the system. Reducing water losses to reasonable levels will require significant replacement of the distribution system.

Table 5 – Distribution System

Item	Number	Units
Mains	310	Miles
Valves	2,786	Each
Hydrants	1,110	Each
Automatic Meter Readers	6,330	Each
Pump Stations	11	Each
PRV	24	EA
Storage Tanks	14	EA
Fill Stations	3	EA

6.1. WATER MAINS

The District has approximately 310 miles of waterline with many areas nearing or exceeding their design life. Many of the older lines were also installed using poor construction practices and/or substandard materials. Replacing the aging water infrastructure shall be prioritized by age, condition, material, failure rates and maintenance costs. Repair, replacement, and inspection of fire

hydrants in coordination with the Pagosa Fire District can increase the Insurance Services Office (ISO) rating which can reduce property insurance. Valves and hydrants shall be replaced in conjunction with replacement of mains with all three items, mains, valves and hydrants, undertaking a long-term replacement program which will run throughout this Capital Improvement Plan timeline and into future plans.

The Automatic Meter Readers also known as Firefly's have been completely changed out over the last three years thus there is little concern for the need to replace significant numbers of these units for several years. There is a likelihood that failures of the units will begin during the last half of this plan therefore we anticipate replacement of the units beginning in 2025 and increasing through the final years of this plan.

Table 6 – Water Mains

Construction Item	Number	Total Cost	Water Fee	CIF
Water Line	310 MI	\$6,000,000	80%	20%
Valves	110 EA	\$480,000	80%	20%
Hydrants	1,110 EA	\$1,000,000	100%	0%
Automatic Meter Readers	440	\$154,000	80%	20%

6.2. PUMP STATIONS AND PRESSURE REDUCING VALVES (PRV'S)

Pump stations and PRV's are mechanical devises that do wear out and eventually need replacement. Pumping stations will need updated controls and VFD's.

A significant number of PRV's have reached or exceeded their expected operational expectancy, thus all PRV's should be rebuilt or replaced within this plan.

Table 7 – Pump Stations and PRV's

Construction Costs	Total Cost	Water Fee	CIF
Pump Stations	\$735,000	80%	20%
PRV	\$100,000	80%	20%

A new pump station will be designed and installed at second street to allow water from uptown to be pumped to the Snowball water storage tank. This tank sets the pressure for downtown Pagosa Springs. This will allow the uptown treatment plants, Hatcher and San Juan to provide water to District 2 if needed. It will also aid in the startup of the new Snowball water treatment plant.

A new pump station will also be designed and installed near the Breakroom Bar to allow water from downtown to be moved uptown. This will allow water produced from the Snowball water treatment plant to provide water to District 1 if needed.

Table 8 – New Pump Stations

Construction Costs	Total Cost	Rate	CIF
2 nd Street	\$65,000	20%	80%
Breakroom	\$85,000	20%	80%

6.3. FILL STATIONS

Three fill stations are provided by the District to allow the purchase of potable water to individuals that may reside outside of the District boundaries. The fill stations are located strategically throughout the district to provide convenience to users of the fill stations. The fairgrounds fill station is located east of Pagosa Springs on the Archuleta County fairgrounds off Mill Creek Road. The Lyn Avenue fill station is located near the entrance of the Districts main campus on Lyn Avenue. The third fill station is located west of Pagosa Springs on Trails Boulevard. There has been discussion on relocating the Trails Boulevard fill station to Aspen Springs on County owned property located on the Corner of Hurd Drive and Highway 160.

All three fill stations are in good repair however over the next 20 years we can expect replacement of buildings, pipes, hardware and software. We are anticipating \$300,000 in capital costs with 80% of coverage coming from rates with the remaining paid by CIF. If the fill station on Trials were to be moved a 12" waterline would have to be extended a distance of 2.5 miles from Elk Park to Hurt Drive at an estimated cost of \$1.5M. This \$1.5M is not included in the Capital Plan as it is anticipated the costs can be recouped from grants received by either Archuleta County and/or the Aspen Springs Community.

6.4. STORAGE TANKS

The District operates and maintains fourteen finish water storage tanks. The state mandates that the exterior of each tank is inspected quarterly and a comprehensive inspection of the outside and inside of the tanks be completed every five years. The comprehensive inspections on all tanks was completed in 2022. The results of the comprehensive inspections were used to assess the condition and need for repair or replacement.

Seven of the fourteen tanks are in good repair and there are no anticipated capital improvement requirements over the next ten years.

Table 9 – Storage Tanks

Tank	Total Cost	Task	Rate	CIF
Cemetery	\$90,000	Paint	80%	20%
Eagle Peak	\$90,000	Paint	80%	20%
Elk Park	\$90,000	Paint	80%	20%
Elk Run	\$60,000	Paint	80%	20%
Hatcher	\$110,000	Paint, Ladder and Fence	80%	20%
Log Park	\$90,000	Paint	80%	20%
Loma Linda	\$90,000	Paint	80%	20%
Meadows	\$120,000	Paint	80%	20%
Reserve	\$85,000	Paint	80%	20%
Reservoir Hill	\$130,000	Paint	80%	20%
Stevens 1	\$85,000	Paint	80%	20%
Stevens 2	\$110,000	Paint	80%	20%

6.5. COMMUNICATIONS

Booster stations and storage tanks communicate operations and water levels through radios, plc's and transponder stations. The existing communication technology is no longer supported by vendors and thus must be replaced with modern infrastructure. This upgrade began in the 2018 budget year and will continue through this capital improvement planning period.

Table 10 – Distribution Communication

Construction Costs	Total Cost	Water Fee	CIF
Ace Motorola	\$180,000	100%	0%
900 MHz radios	\$115,000	100%	0%

7. WATER TREATMENT SYSTEM

The District owns and operates three water treatment plants, the Snowball, Hatcher and San Juan. All three treat surface waters derived from the San Juan River or tributaries of the San Juan. The Snowball plant provides water for downtown Pagosa Springs and communities south of town. The Hatcher and San Juan Plants primarily provide water for the Pagosa Lakes area. The District does have the capability of moving water from the Pagosa Lakes area to downtown. The District will need to increase capacity and upgrade treatment capabilities to keep up with community growth, increased regulations and system lifespans.

The Hach model 1720 Turbidity meters used in all three WTP are obsolete. As units fail, we will replace with new HACH 5300 series meters. 13 meters in total between plants. Each plant has a Chlorine analyzer which are also obsolete and will be replaced.

Table 11 – Water Treatment Plants

Treatment Plant	Capability (MGD)
Snowball	2.0 (3.5*)
Hatcher	2.0
San Juan	1.0 from Lake Forest 3.0 from River

New Snowball WTP will have a 3.5 MGD capability.

7.1. HATCHER WATER TREATMENT PLANT

The Hatcher water treatment plant is going on eighteen years which is middle aged. There are no major capital improvements necessary for the Hatcher plant.

Table 12 – Hatcher Water Treatment Plant

Component	Cost	Rate	CIF
Structure (HVAC)	\$156,000	100%	0%
Raw Water Pumps	\$138,000	80%	20%
Pre-Treatment	\$74,000	100%	0%
Microfiltration	\$411,000	100%	0%
GAC System*	\$450,000	100%	0%
Disinfection	\$560,000	100%	0%
CIP	\$32,000	100%	0%

The Hatcher plant structure is a concrete building with no major repairs expected. It is anticipated a new HVAC system will be needed within the next ten years.

There are three raw water pumps that pull water from Lake Hatcher into the plant. Both raw water pumps were replaced in 2021. A third critical spare will be purchased in 2023 and in 2024 one of the pumps will be rebuilt every year.

The pre-treatment for the system includes the mixing of coagulants. We anticipate minor costs during this CIP period for the inspection and upkeep of coagulant tanks.

The actual microfiltration system consists of two microfiltration racks with 48 filter modules in each rack. The modules have a life expectancy of eight to sixteen years. Approximately 1/3rd of the modules have been replaced to date. 10 to 15 modules will be purchased each year to assure adequate replacements. The existing air system was constructed with PVC plumbing. The plastic pipe is becoming brittle and failing. The entire air plumbing system is to be replaced with steel plumbing. This will be accomplished over a five-year period.

The Granulated Activated Carbon system has been an on-going maintenance item. The GAC system is used to remove organics from the lake water used in the treatment plant. The carbon has a finite life and historically has been replaced on average every 18 months. There are three carbon vessels and the carbon is replaced in a single vessel every 8 to 10 months.

The clearwell shall be inspected every five years in conjunction with tank inspections by a third party using a Remote Operating Vehicle (ROV). This CIP also includes replacement of one of the three finish water pumps.

7.2. SAN JUAN WATER TREATMENT PLANT

The San Juan water treatment plant can treat water directly from the San Juan River or from Lake Forest.

7.2.1. Pre-Treatment

Source water coming from Lake Forest goes through a pretreatment system consisting of powder activated carbon (PAC) and a Magnetic Ion Exchange (MIEX) process used to remove organic materials in the lake water which if not removed would cause taste, odor and color issues.

There are no anticipated capital improvements necessary for the PAC system. There are some component replacements on maintenance items expected on the MIEX system consisting of reconstruction of the Resin Regeneration Tank and inspections of the Salt Saturator Tank.

Table 13 – San Juan Water Treatment Plant –Pre-Treatment

Component	Cost	Rate	CIF
PAC System	\$20,000	100%	
MIEX System	\$60,000	100%	

7.2.2. Primary Treatment

Both sources of water at the San Juan plant (Lake Forest and San Juan River) are treated through a conventional filtration system and disinfected prior to delivery. Source water coming directly from the San Juan can by-pass the pretreatment facility described above.

The filtration system consists of three Trident package treatment filters manufactured by WesTech. The package system consists of a high rate settling, adsorption clarification, mixed media filtration system. The Trident treatment system is currently followed by chlorine disinfection and a clear well for chlorine detention time. This along with the pretreatment is an acceptable process for the water coming from Lake Forest. The installation of a UV system in 2019 allowed for the treatment of water directly from the San Juan river diversion.

The filters and ductile iron piping are being repainted in 2023.

South wall and west wall of exterior building will need replacing. South wall is failing and will need replacement before 2024. West wall is in good shape but will need addressed in 20-year CIP.

San Juan HVAC heaters are 15-20 years old. Parts are becoming hard to come by. Replacement of 4 heaters in filter room over 10 years.

There are anticipated costs associated with the replacement of two discharge pumps over the ten-year planning period of this CIP along with ongoing inspections of the Clearwell.

Table 14 – San Juan Water Treatment Plant –Primary Treatment

Component	Cost	Rate	CIF
HVAC	23,000	100%	0%
Structure	\$300,000	100%	0%
Trident Filters	\$722,000	100%	0%
Backflow	\$20,000	100%	0%
Chemical Pumps	\$37,000	80%	20%
Ponds	\$360,000	100%	0%
UV System	\$90,000	100%	0%
Clearwell	\$42,000	100%	0%
Finish Water Pumps	\$80,000	80%	20%

7.3. SNOWBALL WATER TREATMENT PLANT

The Snowball water treatment plant is the districts oldest operating water plant. The Snowball Plant was taken over by the District in 1992 when the District annexed the Town of Pagosa Springs water system and the Archuleta Water Company. The Snowball plant in its current form was constructed in 1984 and consists of two Trident conventional filtrations system, similar to the Trident systems in the San Juan Plant but older models. The actual building was constructed in 1968. The building has significant structural problems and needs replacement. The filters have experienced significant rust over the 38 year operational life and the filtration media is due for replacement. Additionally, the plant will not meet current regulatory discharge requirements without significant upgrades. Due to these issues, it has been determined it would be in the best interest of the district to replace the facility with a new system.

7.3.1. Snowball Water Treatment Plant

A replacement for the Snowball Water Treatment Plant is currently under design and ready to go into construction. Construction is expected to take 28 months to complete. The new facility will implement dissolved air floatation for pretreatment followed by microfiltration similar to the Hatcher Water Treatment Plant.

The new facility will have a design capacity of 3.5 MGD.

Costs for the new facility have been estimated at \$44,000,000.

Table 15 – Snowball Water Treatment Plant –Primary Treatment

Component	Cost	Rate	CIF
HVAC	\$105,000	80%	20%
Raw Water	\$10,000	80%	20%
Pretreatment	\$16,000	80%	20%
Microfiltration	\$15,000	80%	20%
Clearwell	\$6,000	80%	20%
Chemical Pumps	\$5,000	80%	20%

8. COLLECTION SYSTEM

The District's collection system is very complex due to its terrain. The following table outlines the components of the collection system.

Table 16 – Collection System

Item	Number	Units
Mains	80	Miles
Manholes	1,902	Each
Dump Station	1	Each
Lift Station	27	Each

The District has substantial spring-time infiltration and inflow (I&I). Infiltration is flow that enters our collection system primarily due to spring snowmelt. Inflow is illegal connections to the collection system usually from roof drains or basement sump pumps. In the spring of 2017 infiltration and inflow increased the hydraulic load to the Vista Wastewater Treatment Plant to excess of its permitted values. To assure we don't unnecessarily expand the wastewater treatment capacity the I&I must be reduced. Inflow will be reduced by investigating suspect properties and disconnecting illegal connections. Infiltration can be reduced by replacing or lining manholes that leak (several are actually located within Village Lake) lining or replacing leaking sewer mains and lining lift stations.

8.1. DUMP STATION

The District has a single dump station located at the entrance of the PAWSD main campus. The dump station allows septic haulers to legally dump septic tank effluent or other approved wastewater into the system. Although the location of the dump station is not optimal there are no significant issues with the dump station.

8.2. SEWER MAINS AND MANHOLES

As stated above to reduce infiltration, repair or replacement of sewer mains and manholes will be necessary. As opposed to replacement of sewer mains, most infiltration problem areas can be resolved by “sleeving” the main. Cured in Place Pipe (CIPP) is a technology that can repair broken joints, cracks, root infiltration, fissures and missing sections of sewer pipeline without digging up and removing the line. This allows the line to be repaired without long term shutdowns of the sewer main.

Manholes can be replaced or relined. Several manholes are located in Village Lake. Even with small leaks these manholes can contribute a significant amount of water to the collection system. It is imperative these manholes as well as manholes located in areas subject to saturation be sealed from infiltration.

Table 17 – Sewer Mains and Manholes

Construction Costs	Number	Total Cost	Rate	CIF
Sewer Main	60 MI	\$1,820,000	50%	50%
Manholes	175 EA	\$200,000	100%	0%
Dump Station	1 EA	\$200,000	50%	50%

8.3. LIFT STATIONS

Lift stations pump wastewater using either subsurface pumps, pumps and motors below the surface of the water in the lift station wet well, or above grade pumps, pumps and motors are above the water surface. The vast majority of lift station problems the District has is the above grade pump systems, so these above grade systems are being replaced with subsurface pumps. Pump stations are mechanical systems that work within a very harsh environment thus need ongoing maintenance and ultimately replacement. With the number of lift stations the District operates replacement will be ongoing requirement.

Table 18 – Lift Stations

Item	Total Cost	WW Fee	CIF
Lift Stations	\$3,025,000	50%	50%

8.4. COMMUNICATIONS

Lift stations communicate operations and water levels through radios, plc's and transponder stations. The existing communication technology is no longer supported by vendors and thus must be replaced with modern infrastructure. This upgrade began in the 2018 budget year and will continue through this capital improvement planning period.

Table 19 – Lift Station Communication

Construction Costs	Total Cost	WW Fee	CIF
Ace Motorola	\$330,000	100%	0%
900 MHz radios	\$40,000	100%	0%

9. VISTA WASTEWATER TREATMENT SYSTEM

The Vista Wastewater Treatment Plant has a hydraulic design capacity of 3.7 to 3.9 MGD and an organic capacity of 3,756 to 3,906 lbs./day BOD₅ depending on the time of the year. The District is required to initiate engineering and financial planning for expansion of the treatment plant whenever hydraulic or organic capacity reaches 80 percent of the design capacity. The District is required to commence expansion construction whenever treatment capacity reaches 95 percent of design capacity. The hydraulic capacity at this time, excluding I&I, is approximately 30 percent of design capacity, during I&I the hydraulic capacity is 81%. Organic loading is currently peaks at 72% percent of capacity.

The Vista Wastewater Treatment Plant is currently under a compliance schedule to reduce inorganic nitrogen and phosphorus. Costs for design and construction for the plant upgrades is estimated at approximately \$13M.

Regulation 31 will take effect in 2034 requiring additional nutrient removal requirements. The upgrade costs to meet compliance is estimated at approximately \$35M.

9.1. OXYGEST

Currently waste activated sludge is sent to the old Oxygest tanks. The Oxygest was a package plant for the Vista Treatment plant approximately twenty years ago. The Oxygest tanks located in a structure between the automotive shop and vehicle storage are now simply used for sludge storage. To minimize odor the stored sludge is aerated driving up energy costs. With minor plumbing changes the sludge storage could be eliminated, removal of the old Oxygest system would free up a large structure which could provide additional equipment and vehicle storage. I have included costs for the removal of the Oxygest system for that purpose. At this time, I would also recommend upgrades to digester diffusers to assure a more efficient operation of sludge digestion. Cost of the Oxygest removal is estimated to be \$100,000.

9.2. HEADWORKS

The step screen has been problematic for the last several years, requiring two complete rebuilds and several days of downtime requiring manual racking. The entire step screen system will need to be re-engineered and installed requiring alterations to the head works layout.

9.3. BLOWERS

The facility currently employs three Hoffman blowers and two Nuros blowers. The Nuros blowers are significantly more energy efficient than the Hoffman blowers.

The three Hoffman blowers will need to be rebuilt during the CIP period.

Two oxidation ditches are used to provide the primary treatment for the facility. The oxidation ditches consist of deep concrete basins with fine air bubble diffusers. Effluent from the headworks travels through the oxidation ditches where aerobic bacteria treat the water. A large drum mixer is used to push the water through the basin. The drum mixer in both basins will need replacement along with diffusers.

9.4. CLARIFIERS

The Vista plant currently has two aging 42-foot diameter clarifiers (clarifiers 1 and 2) and a 60 foot clarifier (clarifier 3). Clarifiers 1 and 2 will be abandoned and replaced with a new single 60-foot clarifier.

The existing 60-foot clarifier is also scheduled to have skim arm upgraded to enhance scum removal.

9.5. DIGESTERS

The two digesters are scheduled to have diffusers replaced during this Capital Improvement Planning period. Diffusers are a wearable item and the anticipated life expectancy will be exceeded by 2027.

9.6. ULTRA VIOLET DISINFECTION/DISCHARGE

The UV system is no longer supported by the manufacture making it increasingly difficult to find parts and maintain the system. The UV system will need to be replaced.

Table 20 – Vista Wastewater Treatment System

Item	Total Cost	WW Fee	CIF
Headwork's	\$1,699,000	20%	80%
Aeration Basins 1 and 2	\$622,000	80%*	20%*
Blowers	\$435,000	80%*	20%*
RAS/WAS	\$60,500	20%	80%
Clarifier 1 and 2 Replacement	\$6,070,000	20%	80%
Centrifuge	\$724,000	20%	80%
Digesters	\$102,000	20%	80%
UV System	\$150,000	80%*	20%*
Oxygest Removal	\$100,000	100%	0%

*the Rate to CIF for some components is different than shown.

10. VEHICLES AND EQUIPMENT

The District has significant assets in vehicles and heavy equipment. The District currently has twenty-nine fleet vehicles, sixteen pieces of heavy equipment, multiple trailers and 12 generators. Due to age, mileage or hours and growth over this CIP we expect to replace existing fleet vehicles and increase the fleet. There are also anticipated replacement of heavy equipment.

Table 21 – Vehicles and Equipment

Item	Number	Total Cost
Fleet Vehicles replacement	32	\$1,425,000
Heavy Equipment Replacement	13	\$1,445,000
Trailers/Light duty equip.	10	\$445,000
Generators	10	\$80,000

*See Appendix H for breakdown

Vehicles and equipment will only be replaced if necessary, the costs associated with this CIP are anticipated costs for 2023.

11. CONCLUSION

Due to age of infrastructure, substandard materials, poor installation practices, community growth and regulatory changes an investment in all aspects of the Districts responsibility's is required to assure the District meets on-going community needs.

Table 22 –Total 20 Year CIP Costs

Item	Total Cost	Ave/Year	Rate	CIF	RWAF
Raw Water	\$7,420,950	\$371,050	\$3,681,950	\$549,500	\$3,189,500
Distribution	\$10,969,000	\$548,450	\$8,944,200	\$2,024,800	
Hatcher WTP	\$1,821,000	\$91,050	\$1,793,400	\$27,600	
San Juan WTP	\$1,431,000	\$71,550	\$1,407,600	\$23,400	
Snowball WTP	\$45,982,570	\$2,299,129	\$9,459,714	\$27,395,742	\$9,102,114
Collection	\$6,190,000	\$309,500	\$3,340,000	\$2,850,000	
Vista WWTP	\$50,760,382	\$2,538,020	\$10,637,676	\$40,122,706	
Vehicles and Equipment	\$3,825,000	\$191,250	\$3,600,000	\$225,000	

APPENDIX

Pagosa Area Water and Sanitation District
2023 - 2042 Capital Improvement Plan
Raw Water

		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	%Rates		%CIF		%RWAF		TOTAL		
Four Mile Diversion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80%	\$72,000	10%	\$9,000	10%	\$9,000	\$90,000	
Diversion		-	-	-	\$45,000	PM	-	-	-	PM	2-C	-	-	-	-	-	-	-	-	-	-	-	80%	\$72,000	10%	\$9,000	10%	\$9,000	\$90,000	
Dutton Pipeline		-	-	\$100,000	PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$100,000	PM	-	80%	\$160,000	10%	\$20,000	10%	\$20,000	\$200,000	
Air Relief		-	-	\$50,000	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$50,000	M	-	100%	\$100,000	0%	\$0	0%	\$0	\$100,000	
Valves		-	-	\$75,000	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$75,000	M	-	100%	\$150,000	0%	\$0	0%	\$0	\$150,000	
West Fork Diversion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diversion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80%	\$36,000	10%	\$4,500	10%	\$4,500	\$45,000	
Snowball line 8 MI		\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	50%	\$1,000,000	25%	\$500,000	25%	\$500,000	\$2,000,000
Pipeline Diversion		-	\$80,000	PM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$80,000	PM	-	80%	\$128,000	10%	\$16,000	10%	\$16,000	\$160,000	
Air Relief 8 EA		\$1,050	M	-	\$1,050	M	-	\$1,050	M	-	\$1,050	M	-	\$1,050	M	-	\$1,050	M	-	\$1,050	M	-	100%	\$9,450	0%	\$0	0%	\$0	\$9,450	
Valves 8 EA		-	\$1,500	M	-	\$1,500	M	-	\$1,500	M	-	\$1,500	M	-	\$1,500	M	-	\$1,500	M	-	\$1,500	M	100%	\$16,500	0%	\$0	0%	\$0	\$16,500	
San Juan Diversion		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Diversion		-	-	\$20,000	M	-	-	-	-	-	-	-	-	-	\$20,000	M	-	-	-	-	-	-	100%	\$40,000	0%	\$0	0%	\$0	\$40,000	
Ponds curtains		-	-	-	\$200,000	M	-	-	-	-	-	-	-	-	\$200,000	M	-	-	-	-	-	-	100%	\$400,000	0%	\$0	0%	\$0	\$400,000	
San Juan Pump Station		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pumps		-	-	-	-	-	-	-	-	-	-	\$100,000	M	-	-	-	-	-	-	-	-	\$100,000	M	100%	\$200,000	0%	\$0	0%	\$0	\$200,000
Controls		-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	\$50,000	M	-	-	-	-	-	-	100%	\$100,000	0%	\$0	0%	\$0	\$100,000	
Pipe line		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Trujillo Rd Pump Station		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pumps		-	-	-	-	-	-	-	-	-	-	\$160,000	M	-	-	-	-	-	-	-	-	\$160,000	M	100%	\$320,000	0%	\$0	0%	\$0	\$320,000
Controls		-	-	-	-	-	-	-	-	-	-	\$75,000	M	-	-	-	-	-	-	-	-	\$75,000	M	100%	\$150,000	0%	\$0	0%	\$0	\$150,000
Pipe line		-	-	-	-	-	-	-	\$100,000	M	-	-	-	-	-	-	-	-	-	-	-	-	100%	\$100,000	0%	\$0	0%	\$0	\$100,000	
Lake Forest Pump Station		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pumps		-	-	-	-	-	-	-	\$100,000	M	-	-	-	-	-	-	-	-	-	\$100,000	M	-	100%	\$200,000	0%	\$0	0%	\$0	\$200,000	
Controls		-	-	-	-	-	-	-	\$50,000	M	-	-	-	-	-	-	-	-	-	\$50,000	M	-	100%	\$100,000	0%	\$0	0%	\$0	\$100,000	
Relocate		-	-	-	\$400,000	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	\$400,000	0%	\$0	0%	\$0	\$400,000		
Augmentation Plan		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Monitoring Stations		-	-	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	\$50,000	2-C	-	-	-	-	\$0	\$0	100%	\$100,000	\$100,000	\$100,000		
SDR		-	\$20,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$50,000	2-C	-	-	\$20,000	2-C	\$0	\$0	100%	\$40,000	\$40,000		
Convert ditches to pipelines																														
Stevens Pump Station/Dutton PL			\$1,500,000		\$800,000																	\$0	\$0	100%	\$2,300,000	\$2,300,000	\$2,300,000	\$2,300,000		
Hatcher Reservoir																														
Hatcher 700 acre feet (replace valves and dredge)									\$200,000													\$0	\$0	100%	\$200,000	\$200,000	\$200,000	\$200,000		
NOTES:																						\$3,681,950	\$549,500	\$3,189,500	\$7,420,950	\$7,420,950	\$7,420,950	\$7,420,950		
RWAF																														
CIF																														
Rate																														

Pagosa Area Water and Sanitation District
2019 - 2029 Capital Improvement Plan
Distribution

			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	%Rate	%CIF	TOTAL					
Distribution system			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Lines	310	MI	\$300,000	PM	\$300,000	PM	\$300,000	PM	\$300,000	PM	\$300,000	PM	\$300,000	PM	\$300,000	PM	\$300,000	PM	\$300,000	PM	\$300,000	PM	\$300,000	PM	80%	\$4,800,000	20%	\$1,200,000	\$6,000,000	
Valves	2,786	EA	\$24,000	PM	\$24,000	PM	\$24,000	PM	\$24,000	PM	\$24,000	PM	\$24,000	PM	\$24,000	PM	\$24,000	PM	\$24,000	PM	\$24,000	PM	\$24,000	PM	80%	\$384,000	20%	\$96,000	\$480,000	
Hydrants	1,110	EA	\$50,000	M	\$50,000	M	\$50,000	M	\$50,000	M	\$50,000	M	\$50,000	M	\$50,000	M	\$50,000	M	\$50,000	M	\$50,000	M	\$50,000	M	100%	\$1,000,000	0%	\$0	\$1,000,000	
Meters/Firefly's	6,100	EA	-	-	-	-	-	-	\$8,000	PM	\$10,000	PM	\$12,000	PM	\$10,000	PM	\$12,000	PM	\$10,000	PM	\$12,000	PM	\$14,000	PM	80%	\$123,200	20%	\$30,800	\$154,000	
Pump Stations			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Eagle Peak			-	-	-	-	-	-	-	-	-	-	\$45,000	PM									-							
Elk Run			-	-	-	-	-	-	-	\$75,000	PM												-	80%	\$60,000	20%	\$15,000	\$75,000		
Jenkins			-	-	-	-	-	-	-	-	-	\$50,000	PM										-	80%	\$40,000	20%	\$10,000	\$50,000		
Reserve			-	-	-	-	-	-	-	-	-	-			\$50,000	PM							-	80%	\$40,000	20%	\$10,000	\$50,000		
Mission Booster			-	-	-	\$100,000	PM	-	-	-	-	-											-	80%	\$80,000	20%	\$20,000	\$100,000		
Elk Park			-	-	-	-	-	\$75,000	PM	-	-	-											-	80%	\$60,000	20%	\$15,000	\$75,000		
Put Hill 1			-	-	-	-	-	-	-	-	-	-									\$45,000	PM	-	80%	\$36,000	20%	\$9,000	\$45,000		
Put Hill 2			-	-	-	-	-	-	-	-	-	-									\$45,000	PM	-	80%	\$36,000	20%	\$9,000	\$45,000		
Terry Robinson			-	-	-	-	-	-	-	\$20,000	PM	-	-			\$50,000	PM						-	80%	\$56,000	20%	\$14,000	\$70,000		
Loma Linda			-	-	-	-	-	-	-	-	-	-						\$100,000	PM				-	80%	\$80,000	20%	\$20,000	\$100,000		
Log Park			-	-	\$125,000	1-B	-	-	-	-	-	-											-	80%	\$100,000	20%	\$25,000	\$125,000		
New 2nd Street				\$65,000	PG	-	-	-	-	-	-	-											-	20%	\$13,000	80%	\$52,000	\$65,000		
New Break Room						\$85,000	PG	-	-	-	-	-											-	20%	\$17,000	80%	\$68,000	\$85,000		
PRV	24		\$10,000	PM	-	\$10,000	PM	-	\$10,000	PM	-	\$10,000	PM			\$10,000	PM						-	80%	\$80,000	20%	\$20,000	\$100,000		
Fill station			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Fair Grounds			-	-	-	-	-	-	-	-	-	-						\$100,000	PM				-	80%	\$80,000	20%	\$20,000	\$100,000		
Lyn Ave			-	-	-	-	-	-	-	-	-	-											-	80%	\$80,000	20%	\$20,000	\$100,000		
Trails			-	-	-	-	-	-	-	\$100,000	PM	-											-	80%	\$80,000	20%	\$20,000	\$100,000		
Relocation of Trails			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80%	\$0	20%	\$0	\$0		
Storage Tanks			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Cemetery			-	-	-	\$90,000	PM	-	-	-	-	-											-	80%	\$72,000	20%	\$18,000	\$90,000		
Eagle Peak			-	-	-	-	-	-	-	\$60,000	PM	-									\$90,000	M	-	80%	\$120,000	20%	\$30,000	\$150,000		
Elk Park	paint		-	-	-	-	\$90,000	PM	-	-	\$85,000	PM											-	80%	\$140,000	20%	\$35,000	\$175,000		
Elk Run			-	-	-	-	-	\$60,000	PM	-	-	-											-	80%	\$48,000	20%	\$12,000	\$60,000		
Hatcher	Paint ladder and fence		-	-	\$110,000	PM	-	-	-	-	-	-											-	80%	\$88,000	20%	\$22,000	\$110,000		
Log Park			-	-	-	-	-	-	-	-	-	-							\$90,000	M			-	80%	\$72,000	20%	\$18,000	\$90,000		
Loma Linda			-	-	-	-	-	-	-	-	-	-				\$90,000	PM						-	80%	\$72,000	20%	\$18,000	\$90,000		
Meadows			-	-	-	\$120,000	PM	-	-	-	-	-			\$100,000	PM						-	80%	\$176,000	20%	\$44,000	\$220,000			
Putt Hill			-	-	-	-	-	-	-	-	-	-									\$90,000	PM	-	80%	\$72,000	20%	\$18,000	\$90,000		
Reservoir			\$40,000	PM	-	-	-	\$130,000	PM	-	-	-											-	80%	\$136,000	20%	\$34,000	\$170,000		
Reserve			-	-	-	-	-	-	-	-	-	-											-	80%	\$48,000	20%	\$12,000	\$60,000		
Snowball			-	-	-	-	-	-	-	-	-	-						\$80,000	PM				-	80%	\$64,000	20%	\$16,000	\$80,000		
Stevens 1	Paint		-	-	-	-	-	-	-	-	-	-										\$90,000	M	80%	\$136,000	20%	\$34,000	\$170,000		
Stevens 2	Paint		-	-	-	-	-	-	-	-	-	-						\$110,000	PM				-	80%	\$160,000	20%	\$40,000	\$200,000		
Ace Motorola BPS			\$15,000	M	\$15,000	M	\$15,000	1-A	\$15,000	M	\$15,000	1-A	\$15,000	M	\$15,000	1-A	\$30,000	M					\$30,000	M	100%	\$180,000	0%	\$0	\$180,000	
900 MHz Radios			-	-	\$5,000	M	-	-	\$5,000	M	-	-	20,000	M	20,000	M	20,000	M	20,000	M	20,000	M	5,000	M	100%	\$115,000	0%	\$0	\$115,000	
NOTES:			RWAF		Rate																						\$8,944,200	\$2,024,800		\$10,969,000

NOTES:	RWAF	Rate
Maintenance	0%	100%
Primarily Maint	20%	80%
Half and Half	50%	50%
Primarily Growth	80%	20%
Growth	100%	0%

\$548,450.00

Pagosa Area Water and Sanitation District
2023-2043 Capital Improvement Plan
Water Treatment (Hatcher)

			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042			%FEE		%CIF		TOTAL
Hatcher	Structure		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	HVAC		\$2,000	M							\$150,000	M				\$2,000	M				\$2,000	M			100%	\$156,000		\$0	\$156,000
	Raw Water		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	Pumps		\$50,000	PM					\$20,000	M				\$20,000	PM				\$20,000	PM				80%	\$88,000	20%	\$22,000	\$110,000	
	Control Valves		-	-	-	-	\$8,000	PM		-	-	-	-	-	-	-	-	-	-	-	-	-		80%	\$6,400	20%	\$1,600	\$8,000	
	Meter		-	-	-	-	\$5,000	PM		-	-	-	\$5,000	PM		-	-	\$5,000	PM		-	\$5,000	PM		80%	\$16,000	20%	\$4,000	\$20,000
	Pre-Treatment		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	Turbidity Meter		\$5,000	M		-	-		\$5,000	M		-		\$5,000	PM		-		\$5,000	M		-		100%	\$20,000	0%	\$0	\$20,000	
	Coagulant Mix Tanks		\$2,000	M		-	-	-	-	-	-	-	\$2,000	M		\$2,000	M		\$2,000	M		\$2,000	M		100%	\$14,000	0%	\$0	\$14,000
	Rapid Mixer		-	-		\$10,000	M		-	-	-	-	\$10,000	M		-		\$10,000	M		-			100%	\$40,000	0%	\$0	\$40,000	
	Microfiltration		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	MF Pumps		-	-	-	-	-	-	-	-	-	-	\$50,000	m		-		-		-	-	-		100%	\$50,000	0%	\$0	\$50,000	
	MF Rack		\$15,000	M	\$15,000	M	\$15,000	M	\$15,000	M	\$15,000	M	\$15,000	M	\$15,000	M	\$15,000	M	\$15,000	M	\$15,000	M	\$15,000	M	100%	\$300,000	0%	\$0	\$300,000
	Air System		\$15,000	M		\$2,000	M	\$15,000	M	\$15,000	m	-	\$2,000	M	-	\$2,000	M	-	\$2,000	M	-	\$2,000	M		100%	\$61,000	0%	\$0	\$61,000
	GAC System		-	-	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
	GAC Contactors		\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	100%	\$450,000	0%	\$0	\$450,000
	Disinfection																												
	UV System		\$5,000	M	\$5,000	M	\$10,000	M	\$5,000	m	\$5,000	m	\$10,000	M	\$5,000	M	\$5,000	M	\$5,000	M	\$10,000	M	\$5,000	M	100%	\$120,000	0%	\$0	\$120,000
	Chlorine		\$18,000	M	\$18,000	M	\$18,000	M	\$18,000	m	\$18,000	M	\$18,000	M	\$18,000	M	\$18,000	M	\$18,000	M	\$18,000	M	\$18,000	M	100%	\$360,000	0%	\$0	\$360,000
	Clearwell		\$1,000	M	\$1,000	M	\$1,000	M	\$1,000	m	\$1,000	M	\$1,000	M	\$1,000	M	\$1,000	M	\$1,000	M	\$1,000	M	\$1,000	M	100%	\$20,000	0%	\$0	\$20,000
Finish Water Pumps		-	-	-	-	\$30,000	M	-	-	-	-	-	-	-	-	-	\$30,000	M	-	-	-		100%	\$60,000	0%	\$0	\$60,000		
CIP																													
Chemical Pumps		-	-	\$8,000	M	-	-	-	-	\$8,000	M	-	-	-	\$8,000	2-B	-	-	-	\$8,000	M	-		100%	\$32,000	0%	\$0	\$32,000	
NOTES:		RWAF	Rate																				\$1,793,400		\$27,600		\$1,821,000		

Pagosa Area Water and Sanitation District
2023-2043 Capital Improvement Plan
Water Treatment (San Juan)

			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	%FEE		%CIF		TOTAL	
San Juan			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	\$23,000			\$23,000	
	HVAC		\$2,000	2-B	\$15,000	2-B	-	-	-	\$2,000	2-B	-	-	-	\$2,000	M	-	-	-	\$2,000	M	-	-	100%	\$300,000			\$300,000	
	Structure		\$100,000	2-B	-	-	-	\$100,000	2-B	-	-	-	-	-	\$100,000	M	-	-	-	-	-	-	-	100%					
	Pretreatment		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	PAC		-	-	-	-	-	-	-	-	-	-	-	\$10,000	2-B	-	-	-	-	-	-	-	\$10,000	M	100%	\$20,000			\$20,000
	MIEX		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	Contactor		\$15,000	2-B	-	-	-	\$15,000	2-B	-	-	-	-	-	\$15,000	M	-	-	\$15,000	M	-	-	-	100%	\$60,000			\$60,000	
	Air Purge Contactor		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%				\$0	
	Resin Regen		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%				\$0	
	Brine Tank		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%				\$0	
	Salt Saturator		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%				\$0	
	Drying Beds		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%				\$0	
	Trident Filters		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
	Filters		\$222,000	2-B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	\$222,000			\$222,000	
	Media		-	-	-	-	-	-	-	-	\$500,000	2-B	-	-	-	-	-	-	-	-	-	-	-	100%	\$500,000			\$500,000	
	Disinfection		-	-	-	-	\$5,000	M	-	-	-	-	\$5,000	M	-	-	-	\$5,000	M	-	-	\$5,000	M	100%	\$20,000			\$20,000	
	Backflow		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	80%	\$29,600	20%	\$7,400	\$37,000	
	Chemical Pumps		\$1,000	PM	\$1,000	PM	\$1,000	PM	\$1,000	PM	\$1,000	PM	\$1,000	PM	\$1,000	PM	\$1,000	PM	\$1,000	PM	\$1,000	PM	\$1,000	PM	100%	\$360,000			\$360,000
	Ponds		\$8,000	M	\$200,000	M	\$8,000	M	\$8,000	M	\$8,000	M	\$8,000	M	\$8,000	M	\$8,000	M	\$8,000	M	\$8,000	M	\$8,000	M	100%	\$90,000			\$90,000
	UV System		\$4,000	M	\$4,000	M	\$4,000	M	\$4,000	M	\$4,000	M	\$4,000	M	\$10,000	M	\$4,000	M	\$4,000	M	\$4,000	M	\$4,000	M	100%	\$42,000			\$42,000
Clearwell		\$2,000	M	\$2,000	M	\$2,000	M	\$2,000	M	\$2,000	M	\$2,000	M	\$2,000	M	\$2,000	M	\$2,000	M	\$2,000	M	\$2,000	M	100%	\$64,000	20%	\$16,000	\$80,000	
Finish Water Pumps		-	-	\$20,000	PM	-	-	-	-	\$20,000	PM	-	-	-	-	\$20,000	PM	-	-	\$20,000	PM	-	-						
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
NOTES:			High	Moderate	Low																					\$1,407,600	\$23,400	\$1,431,000	

NOTES:	High	Moderate	Low
Risk	1	2	3
Consequence	A	B	C
Regulatory	R		
Maintenance	M		

\$71,550

Pagosa Area Water and Sanitation District
2023-2043 Capital Improvement Plan
Water Treatment (Snowball)

	2023		2024		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034		2035		2036		2037		2038		2039		2040		2041		2042		2043		%RATE	%CIF	%RWF	TOTAL				
Snowball	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	\$2,167,170	PG	20%	\$9,102,114	60%	\$27,306,342	20%	\$9,102,114	\$45,510,570	
Structure	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$84,000	20%	\$21,000	\$0	\$105,000
HVAC	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$84,000	20%	\$21,000	\$0	\$105,000
Raw Water	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$84,000	20%	\$21,000	\$0	\$105,000
Control Valves	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$84,000	20%	\$21,000	\$0	\$105,000
Meter	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$84,000	20%	\$21,000	\$0	\$105,000
Pre-Treatment	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$16,000	20%	\$4,000	\$0	\$20,000
Turbidity Meter	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$16,000	20%	\$4,000	\$0	\$20,000
Coagulant Mix Tanks	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$16,000	20%	\$4,000	\$0	\$20,000
Coagulant Mixer	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$16,000	20%	\$4,000	\$0	\$20,000
Microfiltration	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$16,000	20%	\$4,000	\$0	\$20,000
MF Pumps	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$16,000	20%	\$4,000	\$0	\$20,000
MF Rack	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$132,000	20%	\$33,000	\$0	\$165,000
Air System	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$34,400	20%	\$8,600	\$0	\$43,000
Filtrate Tank	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$34,400	20%	\$8,600	\$0	\$43,000
Backwash Tank	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$34,400	20%	\$8,600	\$0	\$43,000
Disinfection	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$13,600	20%	\$3,400	\$0	\$17,000
Clearwell	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$13,600	20%	\$3,400	\$0	\$17,000
Finish Water Pumps	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		20%	\$15,000	20%	\$0	\$0	\$15,000
CIP	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		20%	\$0	20%	\$0	\$0	\$0
Chemical Tanks	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		-		80%	\$0	20%	\$0	\$0	\$0
Chemical Pumps	-		-		-		-		-		-		-		-		-		-		-		-		-		-		-																					

NOTES:	RWAF	Rate	Low
Maintenance	0%	100%	3
Primarily Maint	20%	80%	C
Half and Half	50%	50%	
Primarily Growth	80%	20%	
Growth	100%	0%	

\$2,299,129

Pagosa Area Water and Sanitation District
2023 - 2042 Capital Improvement Plan
Collections

			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	%Fee	%CIF	TOTAL			
Collections			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Lift Stations			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
1	LS1	Trails & Bonita	S&L	-	\$150,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$75,000	50%	\$75,000	\$150,000	
2	LS3	Lakeside & Lakeview	Sub	-	-	-	-	-	-	-	-	-	-	\$150,000	HH	-	-	-	-	-	-	-	50%	\$75,000	50%	\$75,000	\$150,000	
3	LS4	Eagles Loft	Sub	-	-	-	-	-	-	-	-	-	-	-	-	-	\$150,000	HH	-	-	-	-	50%	\$75,000	50%	\$75,000	\$150,000	
4	LS5	Rec Center (Eagles loft)	Sub	-	\$125,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
5	LS6	Cloud Cap Ave	S&L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	50%	\$62,500	50%	\$62,500	\$125,000
6	LS7	Butte Dr	S&L	\$200,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$100,000	50%	\$100,000	\$200,000	
7	LS8	Tor Ct	S&L	-	-	-	-	-	-	-	\$150,000	HH	-	-	-	-	-	-	-	-	-	-	50%	\$75,000	50%	\$75,000	\$150,000	
8	LS9	Piedra Rd (Flanagan)	S&L	-	-	-	\$150,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$75,000	50%	\$75,000	\$150,000	
9	LS10	Saturn Dr	Sub	-	-	-	-	-	-	-	-	\$125,000	HH	-	-	-	-	-	-	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
10	LS11	Sweetwater Dr. & N. Pagosa	S&L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
11	LS12	Equestrian Center	S&L	-	-	-	-	\$150,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$75,000	50%	\$75,000	\$150,000	
12	LS13	Park Ave	Sub	\$60,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$30,000	50%	\$30,000	\$60,000	
13	LS14	Island	Sub	-	-	-	-	-	-	\$125,000	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
14	LS15	Peninsula	S&L	-	-	-	-	\$150,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$75,000	50%	\$75,000	\$150,000	
15	LS16	Bristlecone & Capricho	S&L	-	-	-	-	-	\$150,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$75,000	50%	\$75,000	\$150,000	
16	LS17	Cool Pines & Bristlecone	S&L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
17	LS18	Bristlecone & Shooting Star	S&L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
18	LS22	Meadows Dr. & 160	Sub	-	-	-	-	-	-	-	-	-	\$125,000	HH	-	-	-	-	-	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
19	LS21	Port Ave & Settler	Sub	-	-	-	-	-	-	-	-	-	-	-	\$125,000	-	-	-	-	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
20	LS23	Shooting Star Dr	Sub	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	-	-	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
21	LS24	Aspen Village (Walmart)	Sub	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
22	LS25	Domicile Ci	Sub	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	-	-	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
23	LS26	Yeoman Dr & Trails Blvd	Sub	-	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	-	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
24	LS27	Park & Eagles Loft	Sub	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	-	-	-	50%	\$62,500	50%	\$62,500	\$125,000	
25		Mocking Bird	Sub	\$25,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	-	50%	\$75,000	50%	\$75,000	\$150,000	
26	LS29	LaVentana	E1	-	-	-	-	-	-	-	-	\$80,000	HH	-	-	-	-	-	-	-	-	\$125,000	HH	50%	\$102,500	50%	\$102,500	\$205,000
27		Poplar court	E1	-	-	-	-	-	-	-	-	-	-	-	-	-	\$80,000	HH	-	-	-	-	50%	\$40,000	50%	\$40,000	\$80,000	
28		Monument	E1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$80,000	HH	-	-	50%	\$40,000	50%	\$40,000	\$80,000	
29	LS 28	Cloman	Sub	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$125,000	HH	50%	\$62,500	50%	\$62,500	\$125,000
		Sewer Mains		\$20,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	\$100,000	HH	50%	\$910,000	50%	\$910,000	\$1,820,000
		Manholes		\$20,000	M	-	\$20,000	M	-	\$20,000	M	-	\$20,000	M	-	\$20,000	M	-	\$20,000	M	-	\$20,000	M	80%	\$160,000	20%	\$40,000	\$200,000
		Dump Station		-	-	-	-	-	-	\$200,000	HH	-	-	-	-	-	-	-	-	-	-	-	-	50%	\$100,000	50%	\$100,000	\$200,000
		Ace Motorola L.S		\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$30,000	M	\$15,000	M	-	\$15,000	M	\$15,000	M	\$15,000	M	-	100%	\$330,000	0%	\$0	\$330,000
		900 MHz Radios		\$5,000	M	-	-	\$5,000	M	-	-	\$5,000	M	-	\$5,000	M	-	\$5,000	M	\$5,000	M	-	-	100%	\$40,000	0%	\$0	\$40,000
				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0		
NOTES:		RWAF	Rate																				\$3,340,000	\$2,850,000	\$6,190,000			

NOTES:	RWAF	Rate
Maintenance	0%	100%
Primarily Maint	20%	80%
Half and Half	50%	50%
Primarily Growth	80%	20%
Growth	100%	0%

\$309,500

Pagosa Area Water and Sanitation District
2023 - 2042 Capital Improvement Plan
Vehicle and Equipment

			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	Water	Waste	Gen Fund	TOTAL														
Unit #	Description	Year																																						
001	Jeep Cherokee	2002	replace	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$0													
002	Jeep Cherokee	2000		-	-	-	-	-	-	-	-	\$40,000	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$40,000													
003	Dodge w250	1991		\$5,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$40,000													
005	Nissan Frontier	2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$5,000													
006	Chev K-1500	2017	-	-	-	-	\$50,000	-	-	-	\$40,000	-	-	-	-	-	-	-	-	-	-	-	-	34%	16%	50%	\$40,000													
007	Chev K-2500	2003	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$50,000													
010	Ford F-250	2019	-	-	-	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%	33%	\$50,000													
011	Chev K-2500	2007	gone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$50,000													
012	Chev K-2500	2007		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$0													
013	Chev K-2500	2008		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$0													
015	Ford F-550	2008	-	-	-	\$180,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$0													
016	Chev K-2500	2009	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$180,000													
017	Chev K-2500	2009	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$50,000													
018	Chev K-3500	2009	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$50,000													
019	Chev K-2500	2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$0													
020	Chev K-2500	2012	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$0													
021	Chev K-2500	2012	\$75,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33%	33%	33%	\$50,000													
022	Chev K-2500	2012	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$75,000													
023	Chev K-2500	2008	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$50,000													
024	Ford F-150	2014	-	-	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$50,000													
025	Ford F-150	2014	-	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$50,000													
026	Ford F-150	2014	-	-	-	-	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	32%	68%		\$50,000													
027	Ford F-150	2014	-	-	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32%	68%		\$50,000													
028	Ford F-150	2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32%	68%		\$0													
029	Ford F-250	2021	-	-	-	-	-	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	-	32%	68%		\$50,000													
030	Ford F-250	2021	-	-	-	-	-	-	-	-	-	\$50,000	-	-	-	-	-	-	-	-	-	-	-	32%	68%		\$50,000													
031	Nissan Frontier	2018	-	-	-	-	-	-	-	-	-	-	\$50,000	-	-	-	-	\$40,000	-	-	-	-	-	32%	68%		\$40,000													
032	Nissan Frontier	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	\$40,000	-	\$40,000	-	-	-	-	-	32%	68%		\$40,000													
034	Nissan Frontier	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	32%	68%		\$40,000													
Additional Vehicles																				\$75,000	\$75,000	\$75,000					\$225,000													
P1	Peterbilt Dump Truck	1993	gone	-	-	-	-	-	\$400,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$400,000													
K1	Kenworth Vac Truck	1993		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$0													
B1	CASE 580SN	2018		-	-	-	-	-	-	-	-	-	-	-	\$150,000	-	-	-	-	-	-	-	-	68%	32%		\$150,000													
B2	CASE 580 SUPER M	2004	-	-	\$150,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$150,000													
D1	Case 1150G Bulldozer	1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		\$0													
E1	Case CX 130C Excavator	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$200,000	-	-	-	-	-	-	-	-		\$200,000													
F1	Case Fork Lift	1999	-	-	-	-	-	-	-	-	\$30,000	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$30,000													
F2	Toyota Fork Lift	-	-	\$40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$40,000													
F3	HC Fork Lift	-	-	-	-	\$40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		\$40,000													
F4	GEHL Sky Lift	2008	-	-	-	-	-	-	-	-	-	-	-	-	\$95,000	-	-	-	-	-	-	-	-	-	-		\$95,000													
L1	Case 621E Loader	2011	-	-	-	-	-	-	-	-	\$200,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-		\$200,000													
L2	Case 85-XT Skid Steer	2003	-	\$85,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$85,000													
MG1	Catepillar 12-E Motor Grader	1958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		\$0													
U1	Kubota Tractor	1982	-	-	-	-	\$25,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$25,000													
U2	YAMAHA YFM 700	2018	-	-	-	-	-	\$15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$15,000													
U3	John Deere Gator	2017	-	-	-	-	-	\$15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		\$15,000													

			2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042				
T1	Felling Flat Bed Tilt	2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$36,000	-	-	-				\$36,000
T2	Kaufman Dump Trailer	2013	\$20,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68%	32%		\$20,000
T3	Kaufman Flat Bed	2007	-	-	-	-	-	-	-	-	-	\$9,000	-	-	-	-	-	-	-	-	-	-				\$9,000
T4	Shopbuilt Gator Trailer	1989	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
T5	Triton Snowmobile Tlr	2008	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
T6	Big Tex Generator Tlr	1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
T7	Big Tex Generator Tlr	1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
T8	Big Tex Generator Tlr	1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
T9	Exp Flat Bed Gen Tlr	2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
T10	Express Ques Tlr	2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
T11	SRE Jet Trailer	1994	-	\$25,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		100%		\$25,000
T12	PAC/TEC Valve Exc Trl	2011	-	-	-	-	-	-	-	-	-	-	-	\$5,000	-	-	-	-	-	-	-	-				\$5,000
T13	PAC/TEC Valve Exc Trl	2011	-	-	-	-	-	-	-	-	-	-	-	-	-	\$5,000	-	-	-	-	-	-				\$5,000
T14	EZ Screen	2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
T15	Dri Prime 6" Pump Trl	2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$5,000	-	-	-	-				\$5,000
T16	Ingersoll Air Comp Trl	2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$5,000	-	-	-	-	-				\$5,000
BT1	KAR Boat Trailer	2013	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	\$500	-	-	-				\$500
BT2	Boat Trailer	2009	-	-	-	-	-	-	-	-	-	-	\$500	-	-	-	-	-	-	-	-	-				\$500
G1	Cummins 855 (off & shop)		-	-	\$106,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33%	33%	33%	\$106,000
G2	Generac 2000 (Vista)		-	-	-	\$30,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$30,000
G3	Generac 2000 (San Juan)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
G4	Generac (Snowball)		-	-	-	-	-	-	-	\$20,000	-	-	-	-	-	-	-	-	-	-	-	-	100%			\$20,000
G5	Generac (Hatcher)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
G6	Onan (Mockingbird)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
G7	Generac (LS 3)		\$55,000	-	-	-	-	-	\$6,000	-	-	-	-	-	-	-	-	-	-	-	-	-				\$61,000
G8	Generac (LS 5)		-	-	\$55,000	-	-	\$6,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$61,000
G9	Generac (Meadows)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$0
G10	Cummins 125		-	-	-	\$106,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				\$106,000
G11	Onan 30		-	-	-	-	-	-	-	-	-	\$7,500	-	-	-	-	-	-	-	-	-	-				\$7,500
G12	Onan 30		-	-	-	-	-	-	-	-	-	-	-	\$7,500	-	-	-	-	-	-	-	-				\$7,500
																										\$445,000
																										\$3,825,000