

Upper Gunnison River Water Conservancy District

210 West Spencer Avenue, Suite B • Gunnison, Colorado 81230 Telephone (970) 641-6065 • www.ugrwcd.org

<u>BOARD OF DIRECTORS</u> <u>AGENDA – COMBINED BUDGET WORK SESSION & REGULAR BOARD MEETING</u>

Monday, September 26, 2022 at 5:30 p.m. 210 West Spencer Avenue, Suite B, Gunnison, CO 81230 and via Zoom video/teleconferencing: <u>https://us02web.zoom.us/meeting/register/tZMpc-itqjwvGdflxLZJykJ9KRuHhbfURSrd</u>

MISSION STATEMENT

To be an active leader in all issues affecting the water resources of the Upper Gunnison River Basin.

5:30 p.m.	1.	Call to Order
5:31 p.m.	2.	Agenda Approval
5:33 p.m.	3. • •	Consent Agenda Items: Any of the following items may be removed for discussion from the consent agenda at the request of any Board member or citizen. Approval of August 29, 2022 Meeting Minutes Consideration of Operating Expenses Consideration of Non-Operating Expenses
5:40 p.m.	4. • •	2023 Budget Work Session Discussion of Initial Draft 2023 Budget Funding Requests for 2023
6:30 p.m.	5.	BREAK
6:50 p.m.	6.	Presentation & Conversation: John McClow & Sonja Chavez (UGRWCD) and Erin Wilson (Wilson Water Group). Upper Gunnison Basin Hydrology, Compact Risk, & UGRWCD Risk Reduction.
7:25 p.m.	7.	Discussion with Colorado State Engineer, Kevin Rein, Regarding Potential Compact Curtailment Administration and Rules

7:50 p	.m.	8.	Legal and Legislative Update
8:00 p	.m.	9.	General Manager Update
8:10 p	o.m.	10.	 Miscellaneous Matters Gunnison Energy Production - Solar Panels Current Gunnison River Spreadsheet Newspapers and Other Water Articles
8:15	p.m.	11.	Citizens Comments
8:17	p.m.	12.	Future Meetings
8:20	p.m.	13.	Summary of Meeting Action Items
8:30	p.m.	14.	Adjournment

Note: This agenda is subject to change, including the addition of items or the deletion of items at any time. All times are approximate. Regular meetings, public hearings, and special meetings are recorded, and action can be taken on any item. The Board may address individual agenda items at any time or in any order to accommodate the needs of the Board and the audience. Persons with special needs due to a disability are requested to call the District at (970) 641-6065 at least 24 hours prior to the meeting.

AGENDA ITEM 3 Consent Agenda Items

Upper Gunnison River Water Conservancy District Meeting Minutes of the Board of Directors Monday, August 29, 2022

The Board of Directors of the Upper Gunnison River Water Conservancy District (UGRWCD) conducted a regular Board meeting on Monday, August 29, 2022 at 5:30 p.m. in the District office, 210 West Spencer Avenue, Suite B, Gunnison, CO, 81230 and via Zoom video/teleconferencing.

Board members present: Sara Bergstrom, Rosemary Carroll, Joellen Fonken, Rebie Hazard, Stacy McPhail, Julie Nania, Bill Nesbitt, Michelle Pierce, John Perusek, Don Sabrowski and Andy Spann.

Board members absent: None

Others present: Sonja Chavez, UGRWCD General Manager Cheryl Cwelich, UGRWCD Watershed Program Coordinator Jesse Kruthaupt, Trout Unlimited John McClow, UGRWCD General Counsel Luke Mecklenburg, Colorado Attorney General's Office (via Zoom) Beverly Richards, UGRWCD Water Resource Specialist Jill Steele, UGRWCD Accountant Chris Sturm, Colorado Water Conservation Board (via Zoom) Cody Tusing, City of Gunnison Public Works Sue Uerling, UGRWCD Admin. Asst./Communications Support Specialist

1. Call to Order

President Michelle Pierce called the meeting to order at 5:30 p.m.

2. Agenda Approval

Director John Perusek moved and Director Rebie Hazard seconded approval of the agenda. The motion carried.

3. Consent Agenda Items

Director Julie Nania noted a correction to the July 25, 2022 minutes stating that on page 5, the representative from Commissioner Kate Greenburg's office should be "Bethany" Howell, not Bethan. Director Rebie Hazard asked that the budget summary be pulled out for further discussion.

Director Sara Bergstrom moved and Director Joellen Fonken seconded approval of the consent agenda. The motion carried.

Director Hazard asked about the budget overrun in audit and accounting. General Manager Sonja Chavez responded that the overrun was due to work that Jill Steele has been doing with consultant Kim Antonucci in re-configuring and streamlining the District's Quick Books accounting software.

Rebie also asked about the overrun of expenses for interns. Sonja said that the District used two interns that were not budgeted for and that additional expenses were also incurred in paying John Murphy, who put in extra hours towards the social media campaign and the Gunnison River Festival. Rebie asked if in the future, interns can report to the Board about their accomplishments and experiences. Sonja agreed this would be a good idea. It was noted that there are some unspent funds that were budgeted for in 2022 that could be shifted to this category if needed. Sonja offered that for 2023, it might be helpful to have a separate line item for interns.

4. 2023 Budget

Discussion of goals: General Manager Chavez noted several programs for 2023 that will require budget consideration including but not limited to: Watershed and forest health assessments with the completion of wetlands assessment this year and geofluvial assessments next year; Continue watershed management planning education and outreach in earnest; Stream assessment work as part of the Watershed Management Planning Process; Continue long-term water quality monitoring (and it was noted that short-term monitoring of Tomichi Creek, for uranium and organic carbons, might be needed to meet new standards as directed by the Water Quality Control and Cebolla Creek also may require some baseline data before new standards go into effect for rare earth mineral mining); Allocation for continuation of monitoring algae at Blue Mesa; Hiring a consultant and assembling stakeholders groups to continue the drought contingency planning process (and it was noted here that of the \$325,000 allocated for this process, \$140,000 was funded by the Bureau of Reclamation); a budget line item for the Wet Meadows Program to provide matching funds for grants and/or possibly for workforce expenses; continuation of funding for Taylor River basin hydro modeling, including assistance for data collected from ASO flights; a possible remote generator site at Black Mesa and the GAP radar site; municipal source water protection planning/projects for Crested Butte and Mt. Crested Butte; and the Gunnison River Town Ditch inlet improvements.

Director Rosemary Carroll asked if these priorities will be reflected in the draft budget? Sonja replied "yes" and that the September Board meeting will be primarily focused on discussion of the budget.

Director Bill Nesbitt suggested the District seek funding from the City to help offset extra expenses for the Black Mesa remote cloud seeding generator. The District will be requesting participation from new potential parties to support the growing program.

Assessor's Property Valuations: 2022 property tax preliminary assessed valuations overall decreased from last year by \$4,923,955 or -0.62%.

- Gunnison County decreased from last year by \$4,101,680 or -0.56%
- Hinsdale County decreased from last year by \$901,410 or -1.73%
- Saguache County increased from last year by \$79,135 or 1.81%.

5. Presentation by Chris Sturm, Colorado Water Conservation Board on "Wildfire Ready Watershed"

Chris Sturm explained that the CWCB was tasked with assessing wildfire risk and outcomes as a Legislative Directive resulting from Senate Bill 21-240 and that the CWCB independently added determining a framework that local communities can use to assess their local watershed and mitigate risk. He said they came up with an equation of "VALUES (including water infrastructure, public infrastructure, property and life safety) plus RISK (including floods after fire, fluvial hazards, mud and debris flow, water quality impairments and hillslope erosion) = SUSCEPTIBILITY (including statewide level; relative risk by watershed and a framework for addressing risk and how this directly intersects.)

Director Rosemary Carroll asked if the data they have collected would be available to the public as she felt this would be important information for our WMP Committee and the District.

Chris said the CWCB has a goal of providing an overlay of all of the potential hazards over the post hazard data, along with maps, and that they hope to complete this by Thanksgiving. He said the full presentation and updates, such as the overlays, will be available at https://www.wildfirereadywatersheds.com/

Director Julie Nania observed that the risk to the front range appeared to look much higher due to their larger population base and whether the CWCB could use our local assessment data to interface with the state's data to give a clearer picture of risk given that much of their water supply comes from the western slope and given the lack of redundancy in water supply in rural areas. Julie also wondered as the District turns towards the suite of options for mitigation efforts, how do you get the most bang for your buck dollarwise?

Chris said that with the final report produced under the assessment, the CWCB will be producing a statewide map showing the risk for each area in the state and that he hopes that they can also push out basin-wide maps giving a more detailed risk assessment that should help eliminate factors like heavy areas of population. Chris agreed with Julie that factors such as redundancy, for instance, can be very important for more rural areas that might not have a backup water supply for drinking water. Chris said he is happy to sit down with groups to talk about how best to implement the framework for their local community.

Director Bill Nesbitt mentioned that he had some concerns about ground testing the data that came out of the state's assessment as back in the 1980's the data released by FEMA about the flood plain in Gunnison County turned out to be inaccurate and now property owners are faced with increased costs for flood insurance. "Will there be truth testing of the statistics?" Bill asked.

Chris replied that the CWCB is not a regulatory entity and that this study has no impact on property owners, such as an increase in insurance costs. He also said they are "not creating risk" with their assessment. He pointed out that it is not the CWCB's position to implement any sort of plans or outcomes from the study but that they are merely providing data and a framework for local authorities to address their own risk and possible mitigation plans. Chris said that while the CWCB will not be directly involved in helping local watersheds with the assessment and mitigation process, they do have a tool and funding available for communities to be able to help themselves and his goal is to be sure that all entities around the state are aware of this. He said they are happy to sit down with anyone to talk about local wildfire preparedness.

General Manager Sonja Chavez asked Chris whether the CWCB used consultants or staff to conduct their assessment. Chris answered that they used both - outside consultants to collect a lot of the data and in-house staff to assimilate the data. Sonja also asked if the CWCB had considered the impact of small legacy mines in their assessment. Chis replied that they did not look at mines on a statewide scale but that he thought this would be an important consideration for the local framework.

6. BREAK

7. Legal and Legislative Matters

General Counsel John McClow reported that he has had some recent discussions with Mount Crested Butte Water and Sanitation District (Mt. CBWSD) about proposed improvements to Meridian Lake Reservoir. John said that the Mt. CBWSD approached UGRWCD several years ago about this and an agreement was drawn up. Then, due to some changes in management, the Mt. CBWSD went into hiatus on the project and now they are ready to resume activities. John said that Mt. CBWSD would be responsible for paying for and making improvements to Meridian Lake Reservoir, with the UGRWCD's approval. The basic premise is that they would deliver additional water to Meridian from Washington Gulch via a canal or pipeline and thereby increase the firm yield of the reservoir. In exchange they would have the right to use some of that water. The UGRWCD has the option to participate in helping finance some of the improvements to the outlet works which can benefit our water augmentation program. The District will also jointly file for new water rights for the reservoir. John offered to put a packet together about the project for the Board to review at the October Board meeting.

Director Bill Nesbitt asked if any funds need to be allocated for the 2023 budget for the project and John reiterated that all of the costs will be borne by the Mt. CBWSD unless we choose to help with improvements to the outlet works. Sonja noted that she would have this as an item for the budget discussion.

Director Rosemary Carroll noted that she was involved in the initial agreement process and that she recalled Mt. CBWSD proposing two possible options for improvements, one being the installation of a new pipeline and one being a canal. Her recollection was that there were some concerns about gravity. John agreed and said that costs will have changed significantly since then as well, so the project will definitely need review.

Counsel McClow also noted that the Bureau of Reclamation's deadline for states to provide plans to address the Colorado River shortage came and went without any solutions. He said all three lower basins states sent letters outlining how much each of them has already done towards conservation and that both California and Arizona noted that any further reductions must come from agriculture. Their replies were that the government could pay between \$1,500 to \$2,400 per acre to fallow agricultural acres, which the budget cannot support. John pointed out that even fallowing is only a short-term bandaid and that there will have to be permanent reductions to shore up the system. He noted that if we have another dry year in 2023 like we did in 2022, then in 2024 Lake Powell and Lake Mead could go to Deadpool and nobody downstream well get any water. Basically, everything is at a stalemate right now.

Director Don Sabrowski thanked John for the letter he wrote for the Gunnison Stockgrowers Association. Don admitted he was still a little confused why the upper basin states are immune to action at this time by the Secretary of Interior. John replied that there is no legal device nor legal obligation for the upper basin states to curtail their usage since the upper basin states are in compliance with the compact and are actually taking less water than the compact allows.

8. Basin Water Supply Update

Water Resource Specialist Bev Richards reported that at the recent Aspinall Meeting, forecasters are predicting that there is a 60 percent chance that the Gunnison River basin could move to a neutral or El

Nino weather pattern by Spring, which historically has brought more precipitation to the region. At the meeting, they also noted that the water supply forecast changed from normal to below normal. Bev said their model was incorrect and initially showed more snowpack, especially above Taylor Reservoir, than was actually received.

9. General Manager and Staff/Committee Updates

Treasurer's Report: Treasurer Bill Nesbitt reported he and Sonja met with the District's bond advisor at the Colorado Water Congress meeting and agreed to enter into a trade for \$250,000 US Treasuries yielding 3.375%. Bill noted that we will continue to try to ladder the maturities of our investments. He also noted that recession indicators are increasing.

Executive Committee Meeting Update: President Michelle Pierce reported the committee met on July 27th and performed senior staff reviews, which went well.

General Manager's Update Miscellaneous: General Manager Sonja Chavez referred to her update in the packet.

Cloud Seeding and Gap Weather Radar – Sonja reviewed the Upper Gunnison Basin's Cloud Seeding Program and noted that the permit is up for renewal this year. She noted there were issues with the manually operated site near Black Mesa this past year but that staff still believe this location could be very beneficial in terms of water production potential. Sonja also noted that the addition of a gap weather radar site in this area could be tied to the basin's remote generators to help alleviate such issues and could increase cloud seeding success using localized Gap Weather data. Sonja asked for the Board's blessing to continue support of adding a remote cloud seeding generator at Black Mesa and to proceed with pursuing gap weather radar near Blue Mesa. She hopes to get a funding proposal to the Board as soon as possible. It was noted by several Board members that they were NOT in support of a Gap radar site on the back of a trailer and were promised a permanent site with permanent structure.

Grant Program Update: Jesse Kruthaupt of Trout Unlimited gave a Power Point presentation on the dam bank repairs and infrastructure improvements recently finished at Vouga Reservoir in cooperation with R & K Staheli Farms (funded through the District's 2020 grant program). Jesse expressed his and the owner's appreciation.

Harmful Algae Bloom (HAB) grant request report: CRWCD Community Funding partnership Director Amy Moyer has been very busy processing Accelerator Grants and has been delayed in providing an update on the status of the District's HAB grant application. Amy hopes to have a report ready in a couple of weeks.

2023 Farm Bill Session with Senator Michael Bennet: Sonja reviewed the details included in her memo with respect to the public listening session held August 18 in Hotchkiss with Senator Michael Bennet. Overall, she was pleased with the opportunity to share the input from UGRWCD's constituents.

Agricultural Assessments – General Manager Chavez reported that she hopes to have 15 to 20 assessments completed by the end of the season and that she is pleased with the 95 percent success rate in assessed project moving forward to actual construction. There was a discussion of lack of information around line locations/direction of flow of ditches (only about 50% complete). The biggest concerns associated with wildfire are where key infrastructure are located in order to assess mitigation of risk. Andy, Don and Stacy can reach out to Stockgrowers and see if they have any input now or at the time of stakeholder meetings. Basic question – Do you have any key infrastructure that you would be concerned about should there be a fire?

Education and Outreach Committee – Committee Chair Sara Bergstrom reported that the committee met on August 11th and discussed where we are at with the current year action plan and preliminary plans for the 2023 Budget Year. She noted that Sue Uerling will be developing a calendar for the 2023 Budget Year/Action Plan activities. She said the committee is also hoping John McClow can develop a "Water 101" presentation and/or brochure that can help explain water rights to residents in the basin. There was also discussion about increasing the amount allocated from \$300 to \$500 for Mini-Grants in hopes that educators will find this amount to be more helpful when considering water education and outreach projects.

Taylor Local User's Group Update: The August 9th Meeting Minutes were included in the Board Packet. TLUG Chair Don Sabrowski reported that at the meeting the TLUG representatives approved keeping flows at 230 cfs through Labor Day to benefit the rafting/boating and agricultural users. The TLUG representatives met again virtually on August 17th and thanks to recent rains, it was determined that the flows could be maintained at 230 cfs through Labor Day. After Labor Day, the TLUG recommendation was to begin to reduce flows by 25 cfs increments until reaching the 82 cfs winter flow rate in order to maintain a year-end storage of 68,200 acre feet in Taylor Reservoir. It was noted that a flow of 82 cfs will actually be better than last year's winter flow rate of 75 cfs. The next meeting is tentatively scheduled for September 8, 2022 at 10 AM.

Wet Meadows Program Update:

Watershed Program Coordinator Cheryl Cwelich reviewed her memo included in the packet and reported that the 22 wicker weirs on BLM property in Monson Gulch were breached to reduce impacts to downstream water rights. The BLM is working with water commissioners to install two Parshall flumes to monitor stream flows through the impacted reach. Staff have reached out to the United States Geological Survey (USGS) to partner on a base flow study that could help to substantiate benefits of wet meadow restoration structures.

Scientific Endeavors: Director Rosemary Carroll noted several upcoming conferences and seminars with respect to watersheds and watershed management: (1) September 12-16 – Mountain Climb at RMBL regarding mountain hydrology, which Rosemary will attend in person; (2) September 12-16 – ASO Workshop – Bev and Rosemary will attend via Zoom; and (3) September 21-23 – Department of Energy conference where proposed funding will be discussed – gearing up for next proposal renewal including funding of about \$8M a year. Rosemary said they are likely moving into the Taylor and going into adaptive forest management and biology and geochemistry. Ken Williams would like to talk to the Board about this project. Rosemary thinks that there will be overlap with forest management and watershed health goals.

STOR Committee Update: Director Joellen Fonken reported she would pass the District's representation baton to Sonja as Frank Kugel had originally participated as UGRWCD representative and she felt it was important for the General Manager to be that person.

Colorado Water Congress Update: This was the highest attended Summer Conference ever. Those in attendance felt they learned a lot from the special Forest/Watershed Health session. Those in attendance felt Senator Michael Bennet showed a firm commitment to watershed health. Heidi Gnall, who is running against Governor Polis made her pitch.

<u>10. Miscellaneous Matters</u>

The monthly reports and news articles were included in the packet.

11. Citizens Comments

No comments were presented.

12. Future Meetings

A list of upcoming meetings was included in the Board Packet. Director Joellen Fonken noted that the location for the September Board meeting was to be announced and General Manager Chavez said she would let the Board know ASAP.

13. Summary of Meeting Action Items

- (1) Make the name change to Bethany Howell in the July 2022 Board Minutes
- (2) Have future interns give a presentation to the Board about their accomplishments and experiences
- (3) Cloud Seeding Reach out to other area constituents for consideration of funding support.

- (4) Invite the Forest Service to make a presentation on their plans for local near-term forest management activities.
- (5) For the October meeting, John McClow will put together a packet for the Board's review on possible improvements to Meridian Lake by the Mt. Crested Butte Water Sanitation District
- (6) John McClow and Andy Spann, with input from Stacy McPhail, will discuss getting input from area ag users regarding their concerns to ag infrastructure if there were a fire in their sub-basin
- (7) Check with Kenneth Hurst Williams on possibly presenting findings from his recent study and give him opportunity to get input on research/science needs of the District at the October Board meeting
- (8) Sonja will provide Rosemary Carroll with priorities for the District with respect to possible funding through the Department of Energy for their studies to commence along Taylor River/Reservoir
- (9) Sonja will convene the Finance Committee for a preliminary review of the 2023 budget.

14. Adjournment

President Michelle Pierce adjourned the August 29, 2022, meeting at 8:25 p.m.

Respectfully Submitted,

John Perusek, Secretary

APPROVED:

Michelle Pierce, President

MEMORANDUM

TO:Board of DirectorsFROM:Jill Steele, AccountantDATE:September 15, 2022SUBJECT:Changes to Financial Reports



This month, you will again find some changes to some of the financial reports.

The first report is a year-to-date budget summary from January through August 2022. The second report is a more detailed, budget summary by month. The remaining reports have the same format as before.

Please let me know if you have any questions about (or objections to!) the new format.

I look forward to seeing you all on the evening of the 26th.

Thank you,

leer

Jill

	o Date Budget Summ uary through August 2022		
	Jan - Aug 22	Budget	% of Budget
Ordinary Income/Expense			
Income	00.570.44	00 510 00	01.40
Asp Water Sales	20,579.66	22,510.00	91.4%
Cloud Seeding Income	90,750.00	92,750.00	97.8%
Interest Income	10,255.77	20,000.00	51.39
Property Tax Income	1,570,941.57	1,609,542.00	97.69
Reimbursed Exp Income	5 40 7 0		
GRF Reimbursed Income	-548.78	1 000 00	070.007
	2,720.41	1,000.00	272.0%
UGRAWE Reimbursed Inc	28,005.26	33,297.00	84.1%
Total Reimbursed Exp Income	30,176.89	34,297.00	88.0%
Unspent Funds from Previous Yr	0.00	9,379.00	0.0%
Watershed Mgmt Income	05 100 75		
CRWCD CFP2021-15 Grant Inc	35,430.75	10,000,00	101 707
CWCB 2019-2891 \$150,000	52,697.97	40,000.00	131.7%
CWCB 2020-2113 \$31,507	0.00	16,000.00	0.0%
CWCB 2022-2085 \$180,000	8,100.00	0.00	0.097
NPS 2021-4821 Grant Inc	0.00	0.00	0.0% 20.0%
TU Restore Grant Inc	8,000.00	40,000.00	
Watershed Restore Program Inc WMP CWCB PO TBD Inc	0.00 0.00	135,500.00 150,000.00	0.0% 0.0%
Watershed Mgmt Income - Other	4,000.00	0.00	100.0%
-			
Total Watershed Mgmt Income	108,228.72	381,500.00	28.49
Wet Meadows Income			
BLM L17AC00255	0.00	134,666.00	0.0%
BLM L19AC00207 Silt	-19,764.00	46,000.00	-43.0%
NFWF Landscape	324,626.25		
NFWF Phase II Grant Income	0.00	107,400.00	0.0%
WM USFS PA 18 Inc	32,941.05		
Total Wet Meadows Income	337,803.30	288,066.00	117.39
WQ Monitoring Inc	34,902.00	35,570.00	98.17
Total Income	2,203,637.91	2,493,614.00	88.4%
Cost of Goods Sold			
Cloud Seeding COST	69,166.44	0.00	100.09
CWCB PEPO GBRT	0.00	0.00	0.0%
NPS PO 2021-4821 COST	0.00	0.00	0.0%
Watershed COST			
2022-2085 Watershed Restoration	6,015.00		
CWCB 2022-2085 (Restore) COST	53,165.75		
CWCB 2019-2891 COST	6,266.25	0.00	100.0%
CWCB 2020-2113 COST	5,000.00	0.00	100.0%
CWCB WtrShed Restore Grant COST	0.00	0.00	0.0%
TU Restore Grant COST	0.00	0.00	0.0%
Watershed COST - Other	0.00		

Upper Gunnison River Water Conservancy District

9:46 AM

Upper Gunnison River Water Conservancy District Year to Date Budget Summary January through August 2022

	Jan - Aug 22	Budget	% of Budget
Total Watershed COST	70,447.00	0.00	100.0%
Wet Meadows COST BLM Coop L17AC00255 COST BLM L19AC00207 COST	6,463.80 22,422.25	0.00	100.0%
NFWF Phase II COST NRCS Grant Exp COST USFS 22-PA-11020400-050	44,505.06 0.00 186.30	0.00 0.00	100.0% 0.0%
USFS PA-2 17-PA COST USFS SPA 2018 COST	489.03 10,395.46	0.00	100.0%
Total Wet Meadows COST	84,461.90	0.00	100.0%
WQ Monitoring COST	57,886.00		
Total COGS	281,961.34	0.00	100.0%
Gross Profit	1,921,676.57	2,493,614.00	77.1%
Expense 1 Op X			
Admin.Travel & Exp. Audit and Accounting	10,476.45 10,267.34	19,000.00 7,500.00	55.1% 136.9%
BOD Expenses	3,690.49	15,000.00	24.6%
BOD Liperses BOD Mileage	1,116.67	2,200.00	50.8%
BOD Mtg Fees	8,860.00	13,360.00	66.3%
Bonding and Insurance	13,504.90	12,003.00	112.5%
Building Rep/Maint Computer Exp	-10,363.57	10,000.00	-103.6%
Computer Software	1,964.19		
Internet	11,952.85		
Computer Exp - Other	1,919.98		
Total Computer Exp	15,837.02		
Copier Expenses	3,949.04		
County Treasurers' Fees	44,611.38	46,237.00	96.5%
Dues, Memberships&Subscriptions	4,507.10	5,222.00	86.3%
Election Expenses	0.00	0.00	0.0%
Legal Publication	6,182.64	6,000.00	103.0%
Manager's Discretionary	946.49	3,000.00	31.5%
Meeting Expenses	2,314.68	3,500.00	66.1%
Office Equipment Exp	2,775.32	21,500.00	12.9%
Office Supplies & Misc Expenses	16,462.39	21,250.00	77.5%
Payroll Exp	01 770 40	00 / 50 00	
CRA Retirement Plan	21,772.40	32,659.00	66.7%
Medical Insurance	39,784.49	34,425.00	115.6%
Payroll Taxes	28,538.13	39,092.00	73.0%
Salaries - Admin	226,000.00	339,000.00	66.7% 87.0%
Salaries - Staff Staff Development	142,779.48	164,117.00 9,000.00	11.4%
Staff Development Work Comp Ins	1,026.00 5,105.00	3,700.00	138.0%
			100.070

Upper Gunnison River Water Conservancy District Year to Date Budget Summary January through August 2022

	Jan - Aug 22	Budget	% of Budget
Total Payroll Exp	465,005.50	621,993.00	74.8%
Postage	1,385.30	1,500.00	92.4%
Public Outreach			
4-H Sponsorships	307.50		
Donation GRF	10,083.03	10,500.00	96.0%
Internship	3,631.88	800.00	454.0%
Mini-Grants	0.00	2,500.00	0.0%
Public Ed./Advertising	20,402.09	28,140.00	72.5%
Youth Conservation Corps	0.00	0.00	0.0%
Public Outreach - Other	225.00		
Total Public Outreach	34,649.50	41,940.00	82.6%
Telephone	4,953.20	7,110.00	69.7%
Utilities, Clean, Condo Dues	12,003.71	15,516.00	77.4%
Vehicle Expenses - Toyota Highl	487.19	4,525.00	10.8%
Total 1 Op X	653,622.74	878,356.00	74.4%
2 Non-Op X			
Asp Subordination Report	4,392.50	5,000.00	87.9%
Aspinall Contract Costs	19,349.15	18,550.00	104.3%
Cloud Seeding	121.81		
Consulting/Engineering	8,132.14	15,000.00	54.2%
Endanger Fish Recovery Program	0.00	3,000.00	0.0%
LSC Expenses	13,464.00	13,464.00	100.0%
RMBL (Basinwide Planning X)	0.00	421,500.00	0.0%
Regional Water Supply Imp. Exp.	36,946.65	729,566.00	5.1%
Grant Program	151,935.88		
Spencer Ave Res Exp	0.00	10,000.00	0.0%
Taylor Park Projects Exp	7,436.00	7,436.00	100.0%
Taylor River Modeling Exp	29,548.51		
Watershed Mgmt X	56,427.50		
Wet Meadow X	1,704.39		
WQ Monitoring	10,000.00	149,691.00	6.7%
Total 2 Non-Op X	339,458.53	1,373,207.00	24.7%
Total Expense	993,081.27	2,251,563.00	44.1%
Net Ordinary Income	928,595.30	242,051.00	383.6%
Other Income/Expense Other Expense			
Contingency	0.00	24,000.00	0.0%
Total Other Expense	0.00	24,000.00	0.0%
Net Other Income	0.00	-24,000.00	0.0%
Net Income	928,595.30	218,051.00	425.9%

h:45 AM 19/15/22 Accrual Basis		Upper	÷	water Conserva Imary by Mont Jugh August 202:	h				
	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	TOTAL
Ordinary Income/Expense									
Income									
Asp Water Sales	0.00	20.00	12,822.50	4,665.14	1,914.05	348.11	680.15	129.71	20,579.6
Cloud Seeding Income	0.00	23,750.00	0.00	0.00	0.00	67,000.00	0.00	0.00	90,750.0
Interest Income	797.79	45.64	1,422.70	338.19	691.87	3,715.81	1,557.36	1,686.41	10,255.7
Property Tax Income	9,982.38	65,265.21	531,218.99	200,495.37	339,196.65	129,595.61	227,193.28	67,994.08	1,570,941.5
Reimbursed Exp Income									
GRF Reimbursed Income	0.00	-196.87	0.00	0.00	-416.97	0.00	55.06	10.00	-548.78
Misc Income	0.00	0.00	77.50	0.00	46.69	2,591.45	4.77	0.00	2,720.41
UGRAWE Reimbursed Inc	8,418.00	0.00	9,716.00	0.00	0.00	9,308.26	563.00	0.00	28,005.26
Total Reimbursed Exp Income	8,418.00	-196.87	9,793.50	0.00	-370.28	11,899.71	622.83	10.00	30,176.8
Watershed Mgmt Income									
CRWCD CFP2021-15 Grant Inc	35,430.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35,430.75
CWCB 2019-2891 \$150,000	0.00	0.00	0.00	52,697.97	0.00	0.00	0.00	0.00	52,697.97
CWCB 2022-2085 \$180,000	0.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	8,100.00
TU Restore Grant Inc	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00	8,000.00
Watershed Mgmt Income - Other	0.00	0.00	0.00	0.00	0.00	4,000.00	0.00	0.00	4,000.00
Total Watershed Mgmt Income	35,430.75	8,000.00	0.00	60,797.97	0.00	4,000.00	0.00	0.00	108,228.7
Wet Meadows Income									
BLM L19AC00207 Silt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-19,764.00	-19,764.00
NFWF Landscape	149,637.00	0.00	0.00	0.00	174,989.25	0.00	0.00	0.00	324,626.25
WM USFS PA 18 Inc	0.00	0.00	0.00	0.00	0.00	32,941.05	0.00	0.00	32,941.05
Total Wet Meadows Income	149,637.00	0.00	0.00	0.00	174,989.25	32,941.05	0.00	-19,764.00	337,803.3
WQ Monitoring Inc	0.00	0.00	27,402.00	0.00	0.00	0.00	0.00	7,500.00	34,902.0
Total Income	204,265.92	96,883.98	582,659.69	266,296.67	516,421.54	249,500.29	230,053.62	57,556.20	2,203,637.9
Cost of Goods Sold									
Cloud Seeding COST Watershed COST	17,364.38	13,185.29	15,515.93	22,846.02	63.94	28.05	98.89	63.94	69,166.4
2022-2085 Watershed Restoration	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6,015.00	6,015.00
CWCB 2022-2085 (Restore) COST	6,231.50	20,000.00	6,934.25	0.00	0.00	0.00	0.00	20,000.00	53,165.75
CWCB 2019-2891 COST	5,540.00	726.25	0.00	0.00	0.00	0.00	0.00	0.00	6,266.25
CWCB 2020-2113 COST	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,000.00
Watershed COST - Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Watershed COST	16,771.50	20,726.25	6,934.25	0.00	0.00	0.00	0.00	26,015.00	70,447.0
Wet Meadows COST									
BLM Coop L17AC00255 COST	0.00	675.34	0.00	688.25	2,289.57	2,121.19	689.45	0.00	6,463.80
BLM L19AC00207 COST	0.00	0.00	0.00	0.00	3,340.38	4,323.53	14,758.34	0.00	22,422.25
NFWF Phase II COST	0.00	8,865.09	2,582.75	6,219.08	7,046.62	4,358.96	4,884.93	10,547.63	44,505.06

09/15/22

Upper Gunnison River Water Conservancy District Budget Summary by Month

Accrual Basis January through August 2022									
	Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	TOTAL
USFS 22-PA-11020400-050	0.00	0.00	0.00	0.00	0.00	0.00	186.30	0.00	186.3
USFS PA-2 17-PA COST	0.00	489.03	0.00	0.00	0.00	0.00	0.00	0.00	489.0
USFS SPA 2018 COST	0.00	0.00	0.00	232.88	4,219.58	5,943.00	0.00	0.00	10,395.4
Total Wet Meadows COST	0.00	10,029.46	2,582.75	7,140.21	16,896.15	16,746.68	20,519.02	10,547.63	84,461.
WQ Monitoring COST	0.00	0.00	0.00	28,942.00	0.00	0.00	28,944.00	0.00	57,886.
Total COGS	34,135.88	43,941.00	25,032.93	58,928.23	16,960.09	16,774.73	49,561.91	36,626.57	281,961.
Gross Profit	170,130.04	52,942.98	557,626.76	207,368.44	499,461.45	232,725.56	180,491.71	20,929.63	1,921,676.
Expense 1 Op X									
Admin.Travel & Exp.	4,276,76	2,211.02	1,223.33	469.60	1,798.43	296.06	75.00	126.25	10,476.4
Audit and Accounting	1,725.00	750.00	251.50	225.00	703.75	5,677.63	331.96	602.50	10,267.3
BOD Expenses	1,200.00	2,117.03	0.00	0.00	0.00	0.00	0.00	373.46	3,690.
BOD Mileage	100.27	106.48	163.81	207.10	96.54	119.94	104.39	218.14	1,116.
BOD Mtg Fees	2,000.00	800.00	900.00	1,180.00	880.00	1,000.00	1,000.00	1,100.00	8,860.
Bonding and Insurance	0.00	0.00	401.00	0.00	13,103.90	0.00	0.00	0.00	13,504.
Building Rep/Maint	1,242.96	-13,586.53	0.00	0.00	0.00	0.00	1,420.00	560.00	-10,363
Computer Exp	1,242.70	10,000.00	0.00	0.00	0.00	0.00	.,.=0000		
Computer Software	121.29	120.00	351.00	120.00	120.00	855.90	138.00	138.00	1,964.1
Internet	1,185.84	400.00	1,615.49	400.00	1,143.80	1,143.80	1,143.80	4,920.12	11,952.8
Computer Exp - Other	1,919.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,919.9
Total Computer Exp	3,227.11	520.00	1,966.49	520.00	1,263.80	1,999.70	1,281.80	5,058.12	15,837.0
Copier Expenses	242.89	728.67	712.61	242.89	897.05	329.39	309.76	485.78	3,949.0
County Treasurers' Fees	58.44	723.51	16,215.42	6,032.01	10,282.31	3,784.86	5,660.08	1,854.75	44,611.
Dues, Memberships&Subscripti	500.00	1,335.50	586.60	0.00	0.00	135.00	0.00	1,950.00	4,507.
Legal Publication	3,902.40	14.94	792.67	1,233.75	115.02	35.70	46.20	41.96	6,182
Manager's Discretionary	102.53	225.00	575.00	0.00	43.96	0.00	0.00	0.00	946.
Meeting Expenses	421.97	103.50	382.08	0.00	254.36	643.74	509.03	0.00	2,314
Office Equipment Exp	2,122.27	612.39	0.00	0.00	40.66	0.00	0.00	0.00	2,775
Office Supplies & Misc Expenses Payroll Exp	5,329.30	6,767.38	126.94	255.34	2,094.43	1,180.22	401.90	306.88	16,462
CRA Retirement Plan	0.00	5,443,10	2.721.55	2,721.55	2,721.55	2,721.55	2,721.55	2,721.55	21,772.4
Medical Insurance	3,512.03	7,748.76	4,529.86	4,529.86	5,019.97	4,404.07	5,019.97	5,019.97	39,784,4
Payroll Taxes	3,528.05	3,650,59	3,668.74	3,540.90	3,541.82	3,537.10	3,520.68	3,550.25	28,538.1
Salaries - Admin	28,250.00	28,250.00	28,250.00	28,250.00	28,250.00	28,250.00	28,250.00	28,250.00	226,000.0
Salaries - Staff	17,749.28	17,749.28	17,889.92	17,749.28	17,889.92	17,889.92	17,749.28	18,112.60	142,779.4
Staff Development	326.00	0.00	0.00	0.00	0.00	275.00	425.00	0.00	1,026.0
Work Comp Ins	0.00	540.00	-257.00	1,871.00	1,331.00	540.00	540.00	540.00	5,105.0
Total Payroll Exp	53,365.36	63,381.73	56,803.07	58,662.59	58,754.26	57,617.64	58,226.48	58,194.37	465,005.
Postage	874.84	0.00	0.00	0.00	0.00	0.00	455.40	55.06	1,385.
<u> </u>									Paa

Accrual Basis January through August 2022 Public Outraach 4-II Sponsorships 0.00 <th>9:45 AM</th> <th></th> <th>Upper</th> <th>Gunnison River</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	9:45 AM		Upper	Gunnison River						
Jan 22 Feb 22 Mar 22 Apr 22 May 22 Jul 22 Jul 22 Aug 22 TOT 4-H Sponsorships 0.00 <	09/15/22			•						
Public Outreach 0.00 0.00 0.00 0.00 0.00 307.50 0.00 0.00 30 Donation GRF 10.000.00 0.00	Accrual Basis			January thro	ough August 202	2				
4H Sponsorships 0.00 0.00 0.00 0.00 307.50 0.00 0.00 0.00 Donation CRF 10.500.00 0.00 <t< th=""><th></th><th>Jan 22</th><th>Feb 22</th><th>Mar 22</th><th>Apr 22</th><th>May 22</th><th>Jun 22</th><th>Jul 22</th><th>Aug 22</th><th>TOTAL</th></t<>		Jan 22	Feb 22	Mar 22	Apr 22	May 22	Jun 22	Jul 22	Aug 22	TOTAL
4H Sponsorships 0.00 0.00 0.00 0.00 307.50 0.00 0.00 0.00 Donation CRF 10.500.00 0.00 <t< td=""><td>Public Outreach</td><td>C</td><td></td><td></td><td>19</td><td></td><td></td><td></td><td></td><td></td></t<>	Public Outreach	C			19					
Donation GR 10,500,000 0.00 0.00 -14,697 0.00 0.00 0.00 10,600,000,000,000 10,600,000,000,000,000 10,600,000,000,000,000 10,600,000,000,000,000,000 10,600,000,000,000,000,000,000,000,000,0		0.00	0.00	0.00	0.00	0.00	307.50	0.00	0.00	307.50
Internation Incomo 314.00 238.64 339.12 175.84 2.407.28 157.00 0.00 36.6 Public Ed./Advertising 2.673.75 6.580.00 2.667.58 3.588.00 2.203.65 1.994.11 260.00 435.00 20.4 Public Outreach 13.173.75 6.894.00 2.906.22 3.927.12 1.962.52 4.933.89 417.00 435.00 20.4 Telephone 882.10 981.18 772.79 640.37 582.56 0.00 529.98 564.22 4.4 Utilities, Clean, Condo Dues 1.244.45 790.39 2.147.10 637.41 2.05.69 1.529.87 1.400.62 1.747.78 12.2 Iotal 1 Op X 96,144.13 75,476.19 87.037.66 74.233.18 95.465.24 79.422.47 72,169.60 73.674.27 653 2 Non-Op X Asp Subordination Report 4.392.50 0.00 0.00 0.00 0.00 0.00 12.181 6.00 12.181 Consulting/Engineering 1.575.89 595	· · ·									10.083.03
Public Ed./Advertising Public Outreach - Other 2.673.75 6.580.00 2.667.58 3.588.00 2.203.65 1.994.11 260.00 435.00 20.4 Total Public Outreach - Other 0.00 0.00 2.906.22 3.927.12 1.962.52 4.933.89 417.00 435.00 22 3.4 Telephone 882.10 981.18 772.79 640.37 582.56 0.00 529.98 544.22 4.4 Vehicle Expenses - Toyota Highi 151.33 0.00 111.03 0.00 86.00 138.83 0.00 0.00 -7.477.78 12 Vehicle Expenses - Toyota Highi 151.33 0.00 111.03 0.00 86.00 138.83 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.747.78 12 Vehicle Expenses - Toyota Highi 151.33 0.00 111.03 0.00 0.00 0.00 0.00 0.00 1.747.78 12 Colud Seeding 0.00 0.00 0.00 0.00										3,631.88
Public Outreach - Other 0.00 0.00 0.00 0.00 225.00 0.00 0.00 2 Total Public Outreach 13,173.75 6,894.00 2,906.22 3,927.12 1,962.52 4,933.89 417.00 435.00 34. Telephone 882.10 981.18 772.79 640.37 582.56 0.00 229.98 1,400.62 1,747.78 12. Vehicle Expenses - Toyofa Highl 151.33 0.00 111.03 0.00 86.00 138.83 0.00 0.00 12.44.85 790.39 2.147.10 637.41 2.505.69 1,529.87 1,400.62 1,747.78 12.1 Total 1 Op X 96,144.13 75,476.19 87.037.66 74,233.18 95,465.24 79,422.47 72,169.60 73,674.27 653 2 Non-Op X 4.350 Subordination Report 4.392.50 0.00 0.00 0.00 0.00 0.00 121.81 80.00 121.81 80.00 121.81 80.00 121.81 80.00 138.463.00 0.00 138.463.00									435.00	20,402.09
Telephone 882.10 981.18 772.79 640.37 582.56 0.00 529.98 564.22 44. Whicle Expenses - Toyota Highi 151.33 0.00 111.03 0.00 86.00 138.83 0.00 0.00 1244.85 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.62 1.747.78 124.00.00 0.00 <t< td=""><td>.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>225.00</td></t<>	.									225.00
Utilities, Clean, Condo Dues 1,244.85 790.39 2,147.10 637.41 2,505.69 1,529.87 1,400.62 1,747.78 12/ Vehicle Expenses - Toyota Hight 151.33 0.00 111.03 0.00 86.00 138.83 0.00<	Total Public Outreach	13,173.75	6,894.00	2,906.22	3,927.12	1,962.52	4,933.89	417.00	435.00	34,649.50
Utilities, Clean, Condo Dues 1,244.85 790.39 2,147,10 637,41 2,505.69 1,529.87 1,400.62 1,747.78 12/2 Vehicle Expenses - Toyota Highl 151.33 0.00 111.03 0.00 86.00 138.83 0.00	Telephone	882.10	981.18	772.79	640.37	582.56	0.00	529.98	564.22	4,953.20
Vehicle Expenses - Toyota Highl 151.33 0.00 111.03 0.00 86.00 138.83 0.00 0.00 Total 1 Op X 96,144.13 75,476.19 87,037.66 74,233.18 95,465.24 79,422.47 72,169.60 73,674.27 653 2 Non-Op X Asp Subordination Report 4,392.50 0.00 0.00 0.00 0.00 0.00 0.00 4,47 Cloud Seeding 0.00 -55,17 0.00 18,904.82 0.00 0.00 0.00 12,81 Consulting/Engineering 1,575.89 595.00 1,242.50 0.00 4,70.00 14,847.5 0.00 0.00 8, LSC Expenses 0.00 0.00 0.00 0.00 0.00 0.00 13,464.00 0.00 13,6 Grant Program 50,000.00 3,650.00 0.00 0.00 0.00 0.00 0.00 0.00 13,464.00 0.00 15,17 Spencer Ave Res Exp 10,000.00 -10,000.00 0.00 0.00 0.00	1	1,244,85			637.41	2,505.69	1,529.87	1,400.62	1,747.78	12,003.71
2 Non-Op X Asp Subordination Report 4,392.50 0.00 0.00 0.00 0.00 0.00 0.00 4,4 Aspinall Contract Costs 0.00 -59.17 0.00 18,904.82 0.00 0.00 503.50 0.00 19, Cloud Seeding 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 121.81 Consulting/Engineering 1,575.89 595.00 1,242.50 0.00 470.00 4,248.75 0.00 0.00 13, Regional Water Supply Imp. Exp. 3,500.00 26,766.75 1,556.64 3,441.38 0.00 1,461.88 0.00 0.00 13, Spencer Ave Res Exp 10,000.00 -10,000.00 0.00 <td></td> <td></td> <td></td> <td>111.03</td> <td>0.00</td> <td>86.00</td> <td>138.83</td> <td>0.00</td> <td>0.00</td> <td>487.19</td>				111.03	0.00	86.00	138.83	0.00	0.00	487.19
Asp Subordination Report4,392,500.000.000.000.000.000.000.004,4Aspinall Contract Costs0.00-59,170.0018,904.820.000.00503.500.00121.81Cloud Seeding0.000.000.000.000.000.000.000.00121.81Consulting/Engineering1,575.89595.001,242.500.00470.004,248.750.000.000.008.LSC Expenses0.000.000.000.000.000.0013,464.000.0013.Regional Water Supply Imp. Exp.3,500.0026,766.751,556.643,441.380.001,681.880.000.0030.00Grant Program50,000.003,650.000.000.000.000.000.000.000.000.000.000.00Taylor Park Projects Exp0.000.000.007,436.000.000.000.000.000.000.000.000.007,7Taylor Park Projects Exp0.000.0013,369.570.00 </td <td>Total 1 Op X</td> <td>96,144.13</td> <td>75,476.19</td> <td>87,037.66</td> <td>74,233.18</td> <td>95,465.24</td> <td>79,422.47</td> <td>72,169.60</td> <td>73,674.27</td> <td>653,622.74</td>	Total 1 Op X	96,144.13	75,476.19	87,037.66	74,233.18	95,465.24	79,422.47	72,169.60	73,674.27	653,622.74
Aspinal Contract Costs0.00-59.170.0018,904.820.000.00503.500.0019,Cloud Seeding0.000.000.000.000.000.000.000.00121.81Consulting/Engineering1,575.89595.001,242.500.00470.004,248.750.000.000.0013,LSC Expenses0.000.000.000.000.000.000.000.0013,464.000.0013,Regional Water Supply Imp. Exp.3,500.0026,766.751,556.643,441.380.001,681.880.000.0036,Grant Program50,000.003,650.000.000.000.000.000.000.0036,Spencer Ave Res Exp10,000.00-10,000.000.000.000.000.000.000.000.00Taylor River Modeling Exp0.000.0013,369.570.000.009,0000.000.007,7Yatershed Mgmt X2.790.0012,794.257,875.0010,893.006,979.0015,096.250.000.001,000Wet Meadow X38,080.000.0010,000.000.000.000.000.0010,0010,000Total 2 Non-Op X72,296.4733,746.8324,043.7150,675.2050,286.1232,225.6547,587.7928,596.76335Total Expense168,440.60109,223.02111,081.37124,908.38145,751.36111,648.12119,757	2 Non-Op X									
Aspinall Contract Costs0.00-59.170.0018,904.820.000.00503.500.0019,Cloud Seeding0.000.000.000.000.000.000.000.00121.811Consulting/Engineering1,575.89595.001,242.500.00470.004,248.750.000.000.0013,LSC Expenses0.000.000.000.000.000.000.0013,464.000.0013,Regional Water Supply Imp. Exp.3,500.0026,766.751,556.643,441.380.001,681.880.000.0036,Grant Program50,000.003,650.000.000.000.000.000.000.000.0013,Spencer Ave Res Exp10,000.00-10,000.000.000.000.000.000.000.000.000.00Taylor Park Projects Exp0.000.0013,369.570.000.000.000.000.000.000.007,Watershed Mgmt X2,790.0012,794.257,875.0010,893.006,979.0015,096.250.000.001,Wed Meadow X38.080.000.000.000.000.000.000.001,0.001,00Total 2 Non-Op X72,296.4733,746.8324,043.7150,675.2050,286.1232,225.6547,587.7928,596.76335Net Ordinary Income1,689.44-56,280.04446,545.3982,460.06 <td>Asp Subordination Report</td> <td>4,392.50</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> <td>4,392.50</td>	Asp Subordination Report	4,392.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,392.50
Consulting/Engineering1,575.89595.001,242.500.00470.004,248.750.000.008.LSC Expenses0.000.000.000.000.000.000.0013,464.000.0013,Regional Water Supply Imp. Exp.3,500.0026,766.751,556.643,441.380.001,681.880.000.0036,Grant Program50,000.003,650.000.000.000.0042,837.12825.0029,623.7625,000.00151,Spencer Ave Res Exp10,000.00-10,000.000.000.000.000.000.000.000.000.00Taylor Park Projects Exp0.000.0013,369.570.000.000.000.007,3,474.9529,Watershed Mgmt X2,790.0012,794.257,875.0010,893.006,979.0015,096.250.000.0010,Wed Meadow X38.080.000.000.000.000.000.0010,10,WQ Monitoring0.000.000.0010,000.000.000.0010,10,Total Expense168,440.60109,223.02111,081.37124,908.38145,751.36111,648.12119,757.39102,271.03995Net Ordinary Income1,689.44-56,280.04446,545.3982,460.06353,710.09121,077.4460,734.32-81,341.40925		0.00	-59.17	0.00	18,904.82	0.00	0.00	503.50	0.00	19,349.15
LSC Expenses 0.00 0.00 0.00 0.00 0.00 0.00 13,464.00 0.00 13, Regional Water Supply Imp. Exp. 3,500.00 26,766.75 1,556.64 3,441.38 0.00 1,681.88 0.00 0.00 36, Grant Program Spencer Ave Res Exp 10,000.00 -10,000.00 7,73,74 25,000.00 151,7 50,77 3,474.95 29,79 0.00 0.00 0.00 7,74,36.00 0.00 0.00 7,74,36.00 0.00 0.00 7,347,49,5 29,70 0.00 12,794.25 7,875.00 10,893.00 6,979.00 15,096.25 0.00 0.00 1, WQ Monitoring 0.00 0.00 0.00	Cloud Seeding	0.00	0.00	0.00	0.00	0.00	0.00	0.00	121.81	121.81
Regional Water Supply Imp. Exp. 3,500.00 26,766,75 1,556,64 3,441.38 0.00 1,681.88 0.00 0.00 36, Grant Program 50,000.00 3,650.00 0.00 0.00 42,837.12 825.00 29,623.76 25,000.00 151, Spencer Ave Res Exp 10,000.00 -10,000.00 7, 7,436,00 0.00 0.00 0.00 7, 7,436,00 0.00 0.00 0.00 7, 7,436,00 0.00 0.00 0.00 7,7 7,446,745 29,7 7,875,00 10,893,00 6,979,00 15,96,52 0.00 0.00 1,0 0.00 1,0 0.00 1,0 0.00 1,0 0.00 1,0 0.00 <td>Consulting/Engineering</td> <td>1,575.89</td> <td>595.00</td> <td>1,242.50</td> <td>0.00</td> <td>470.00</td> <td>4,248.75</td> <td>0.00</td> <td>0.00</td> <td>8,132.14</td>	Consulting/Engineering	1,575.89	595.00	1,242.50	0.00	470.00	4,248.75	0.00	0.00	8,132.14
Grant Program50,000.003,650.000.000.0042,837.12825.0029,623.7625,000.00151,Spencer Ave Res Exp10,000.00-10,000.000.000.000.000.000.000.000.000.00Taylor Park Projects Exp0.000.000.007,436.000.000.000.000.007,436.00Taylor River Modeling Exp0.000.0013,369.570.000.009,443.223,260.773,474.9529,Watershed Mgmt X2,790.0012,794.257,875.0010,893.006,979.0015,096.250.000.0010,00Wet Meadow X38.080.000.000.000.000.000.0010,0010,0010,00WQ Monitoring0.000.000.0010,000.000.000.000.000.0010,00Total 2 Non-Op X72,296.4733,746.8324,043.7150,675.2050,286.1232,225.6547,587.7928,596.76339Total Expense168,440.60109,223.02111,081.37124,908.38145,751.36111,648.12119,757.39102,271.03993Net Ordinary Income1,689.44-56,280.04446,545.3982,460.06353,710.09121,077.4460,734.32-81,341.40926	LSC Expenses	0.00	0.00	0.00	0.00	0.00	0.00	13,464.00	0.00	13,464.00
Spencer Ave Res Exp 10,000.00 -10,000.00 0.00	Regional Water Supply Imp. Exp.	3,500.00	26,766.75	1,556.64	3,441.38	0.00	1,681.88	0.00	0.00	36,946.65
Taylor Park Projects Exp10,00,0010,00,000,007,436,000,000,000,007,7Taylor River Modeling Exp0,000,0013,369,570,000,009,443,223,260,773,474,9529,Watershed Mgmt X2,790,0012,794,257,875,0010,893,006,979,0015,096,250,000,0056,Wet Meadow X38,080,000,000,000,000,000,00930,55735,760,0010,Wo Monitoring0,000,000,0010,000,000,000,000,0010,10,Total 2 Non-Op X72,296,4733,746,8324,043,7150,675,2050,286,1232,225,6547,587,7928,596,76335Total Expense168,440,60109,223,02111,081,37124,908,38145,751,36111,648,12119,757,39102,271,03993Net Ordinary Income1,689,44-56,280,04446,545,3982,460,06353,710,09121,077,4460,734,32-81,341,40926	Grant Program	50,000.00	3,650.00	0.00	0.00	42,837.12	825.00	29,623.76		151,935.88
Taylor River Modeling Exp Watershed Mgmt X0.000.0013,369.570.000.009,443.223,260.773,474.9529.Watershed Mgmt X2,790.0012,794.257,875.0010,893.006,979.0015,096.250.000.0056,Wet Meadow X38.080.000.000.000.000.000.0010,000.0010,00010,00010,000WQ Monitoring0.000.000.0010,000.000.000.000.000.0010,000Total 2 Non-Op X72,296.4733,746.8324,043.7150,675.2050,286.1232,225.6547,587.7928,596.76339Total Expense168,440.60109,223.02111,081.37124,908.38145,751.36111,648.12119,757.39102,271.03993Net Ordinary Income1,689.44-56,280.04446,545.3982,460.06353,710.09121,077.4460,734.32-81,341.40926	Spencer Ave Res Exp	10,000.00	-10,000.00	0.00	0.00	0.00	0.00			0.00
Watershed Mgmt X 2,790.00 12,794.25 7,875.00 10,893.00 6,979.00 15,096.25 0.00 0.00 56,735.76 Wet Meadow X 38,08 0.00 0.00 0.00 0.00 0.00 930.55 735.76 0.00 10,00 10,00 WQ Monitoring 0.00 0.00 0.00 10,000.00 0.00 0.00 0.00 10,00 0.00 10,00 10,00 10,00 0.00 0.00 10,00	Taylor Park Projects Exp	0.00	0.00	0.00	7,436.00	0.00	0.00			7,436.00
Wet Meadow X WQ Monitoring 38.08 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1, 0.00 0.00 0.00 1, 0.00 0.00 0.00 0.00 0.00 0.00 10, 0.00 10, 0.00 0.00 0.00 0.00 10, 0.00 10, 0.00 </td <td>Taylor River Modeling Exp</td> <td>0.00</td> <td>0.00</td> <td>13,369.57</td> <td>0.00</td> <td>0.00</td> <td>., .</td> <td></td> <td></td> <td>29,548.51</td>	Taylor River Modeling Exp	0.00	0.00	13,369.57	0.00	0.00	., .			29,548.51
WQ Monitoring 0.00 0.00 0.00 10,000,00 0.00 0.00 0.00 10,000 0.00 0.00 0.00 10,000 Total 2 Non-Op X 72,296.47 33,746.83 24,043.71 50,675.20 50,286.12 32,225.65 47,587.79 28,596.76 335 Total Expense 168,440.60 109,223.02 111,081.37 124,908.38 145,751.36 111,648.12 119,757.39 102,271.03 993 Net Ordinary Income 1,689.44 -56,280.04 446,545.39 82,460.06 353,710.09 121,077.44 60,734.32 -81,341.40 928	Watershed Mgmt X	2,790.00	12,794.25	7,875.00	10,893.00	6,979.00				56,427.50
Total 2 Non-Op X 72,296.47 33,746.83 24,043.71 50,675.20 50,286.12 32,225.65 47,587.79 28,596.76 339 Total Expense 168,440.60 109,223.02 111,081.37 124,908.38 145,751.36 111,648.12 119,757.39 102,271.03 993 Net Ordinary Income 1,689.44 -56,280.04 446,545.39 82,460.06 353,710.09 121,077.44 60,734.32 -81,341.40 928	Wet Meadow X	38.08	0.00	0.00	0.00	0.00	930.55			1,704.39
Total Expense 168,440.60 109,223.02 111,081.37 124,908.38 145,751.36 111,648.12 119,757.39 102,271.03 993 Net Ordinary Income 1,689.44 -56,280.04 446,545.39 82,460.06 353,710.09 121,077.44 60,734.32 -81,341.40 928	WQ Monitoring	0.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	10,000.00
Net Ordinary Income 1,689.44 -56,280.04 446,545.39 82,460.06 353,710.09 121,077.44 60,734.32 -81,341.40 928	Total 2 Non-Op X	72,296.47	33,746.83	24,043.71	50,675.20	50,286.12	32,225.65	47,587.79	28,596.76	339,458.53
	Total Expense	168,440.60	109,223.02	111,081.37	124,908.38	145,751.36	111,648.12	119,757.39	102,271.03	993,081.27
	Net Ordinary Income	1,689.44	-56,280.04	446,545.39	82,460.06	353,710.09	121,077.44	60,734.32	-81,341.40	928,595.30
Net Income 1,689.44 -56,280.04 446,545.39 82,460.06 353,710.09 121,077.44 60,734.32 -81,341.40 928	NetIncome	1,689.44	-56,280.04	446,545.39	82,460.06	353,710.09	121,077.44	60,734.32	-81,341.40	928,595.30

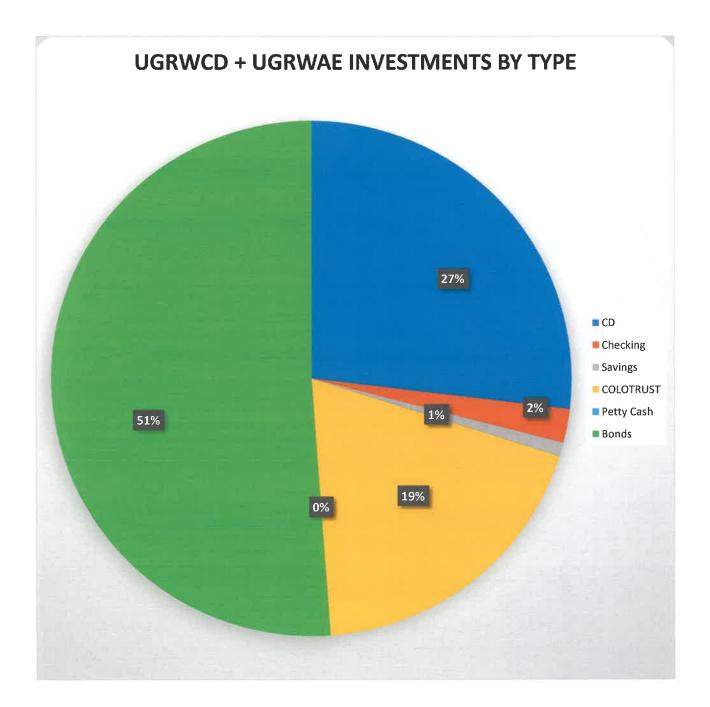
UGRWCD	Instrument	Balance	Cost	Interest	Maturity	Date
Account Name	Туре	8/31/2022	Basis	Rate	Date	Callable
LPL Bond 27 CUSIP 91282CDR9 Treasury Note	BOND	\$ 385,874.80	\$ 394,661.19	0.750%	12/31/2023	
LPL Bond 17 (FHLB) CUSIP 91282CDH1 Treasury Note	BOND	193,212.50	204,335.35	0.750%	11/15/2024	
LPL 19 Pac. Western CD thru LPL CUSIP 69506 YRJ O	CD	242,578.17	245,000.00	1.200%	4/17/2023	
LPL Bond 20 (FHLB) CUSIP 3130 AJLA 5	BOND	510,208.60	550,000.00	0.750%	5/19/2025	
LPL Bond 21 (Fed Farm) CUSIP 3133 EL3P7	BOND	315,905.56	345,000.00	0.530%	8/12/2025	8/12/2022
LPL 22 Merrick Bank CD thru LPL CUSIP 59013KLR5	CD	232,212.17	249,000.00	0.350%	12/30/2024	
LPL Bond 23 (FEDL) CUSIP 3130ALLD4	BOND	228,028.00	250,000.00	0.875%	3/17/2026	9/17/2021
LPL Money Market Account	M.M.	1,059.98		0.010%	N/A	
LPL Bond 24 CUSIP 3130AMDY5 Fedl Home Loan Bank	BOND	456,420.50	500,000.00	1.000%	5/20/2026	5/20/2022
LPL CD 25 Sallie Mae Bank CUSIP 795451 AA1	CD	232,730.89	245,000.00	0.550%	7/22/2024	3/30/2022
LPL 26 (Fed. Home Loan Banks) CUSIP 3130 APBE4	BOND	144,941.92	160,000.00	1.000%	9/30/2026	9/30/2022
LPL 28 Freddie Mac CUSIP 3134 GXQP2	BOND	195,917.20	200,000.00	3.030%	4/28/2025	7/28/2022
LPL 29 FHL CUSIP 3134 GXYD0	BOND	299,979.90	300,000.00	3.250%	6/30/2027	6/30/2023
LPL 30 Synchrony Bank CD CUSIP 87165 EXB8	CD	245,138.67	245,000.00	3.400%	7/29/2025	
LPL 31 Fed. Home Loan Banks BOND CUSIP 3130 AT4D6	BOND	249,496.50	250,000.00	3.375%	6/15/2024	
Bank of the West Checking	СНКС	100,069.29		0.010%	N/A	
Bank of the West CD 046907721	CD	105,411.54		0.350%	12/22/2022	
Community Banks of Colo. CD 0420	CD	51,564.17		0.400%	9/26/2022	
Community Banks of Colo. Lake City CD # 7668	CD	104,170.48		0.500%	5/20/2023	
10520 Gunnison Bank & Trust CD 6637	CD	200,000.00		1.900%	2/26/2025	
10540 Gunnison Bank & Trust - Spencer Ave. Res. 3589	CHKG	50,122.86		0.150%	N/A	
101149 Gunnison Savings & Loan CD 9413	CD	153,256.11		2.050%	10/18/2024	
10295 COLOTRUST PLUS+	COLO.	566,517.82		2.3581%	N/A	
10290 COLOTRUST PRIME	COLO.	168,809.34		1.8645%	N/A	
10200 Petty Cash	PETTY	100.00		N/A	N/A	
TOTAL UGRWCD		\$ 5,433,726.97				
UGRWAE		Balance		Interest	Maturity	
Account Name		8/31/2022		Rate	Date	
Bank of the West Checking	CHKG	\$ 24,702.90		N/A	N/A	
COLOTRUST PLUS+	COLO.	366,641.36		2.3581%	N/A	
TOTAL UGRWAE		\$ 391,344.26				
TOTAL UGRWCD + UGRWAE		\$ 5,825,071.23				

BANK AND BOND BALANCES - UGRWCD and UGRWAE

Total UGRWCD and UGRWAE by Bank Total UGRWCD & UGRWAE by Investment Type **27**% CD \$ 1,567,062.20 LPL Financial (Was Sigma) \$ 3,933,705.36 68% 4% 2% 124,772.19 Bank of the West 230,183.73 Checking Community Banks of Colo. 155,734.65 3% **Savings** 1% 51,182.84 Gunnison Bank & Trust 250,122.86 4% COLOTRUST 1**9**% 1,101,968.52 Petty Cash 100.00 Gunnison Savings & Loan 153,256.11 3% 0% COLOTRUST 1,101,968.52 19% Bonds 51% \$ 2,979,985.48 Petty Cash 100.00 0% Total \$ 5,825,071.23 1**00**% TOTAL ALL BANKS \$ 5,825,071.23 100%

UGRWCD & UGRWAE INVESTMENTS BY TYPE

CD	27%	\$1,567,062.20
Checking	2%	124,772.19
Savings	1%	51,182.84
COLOTRUST	19%	1,101,968.52
Petty Cash	0%	100.00
Bonds	51%	\$ 2,979,985.48
Total	100%	\$5,825,071.23



Upper Gunnison River Water Conservancy District Expenses For Approval (Paid & Payable) August 29 through September 15, 2022

Aug 29 - Sep 15, 2209/01/2022Alan Wartes Media LLCLegal Publication09/14/2022Alexander C. BacaInternship08/31/2022AmeriGasCloud Seeding08/29/2022Andy Spann BODBOD Mtg Fees08/29/2022Andy Spann BODBOD Mileage09/08/2022Andy Spann BODBOD Mileage09/07/2022AnthemMedical Insurance09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Bill NesbittBOD Expenses09/06/2022Bill NesbittBOD Expenses09/01/2022Bill Nesbitt - BODBOD Mtg Fees09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST09/02/2022Gunnison Materials LLCNFWF Phase II COST09/02/2022Gunnison Materials LLCNFWF Phase II COST	25.52 181.63 121.81 100.00 4.38 273.87 56.21 33.83 430.57 100.00 242.89 112.67 77.65 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22 284.95
09/14/2022Alexander C. BacaInternship08/31/2022AmeriGasCloud Seeding08/29/2022Andy Spann BODBOD Mtg Fees08/29/2022Andy Spann BODBOD Mileage09/08/2022AnthemMedical Insurance09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Bill NesbittBOD Expenses08/29/2022Bill NesbittBOD Mtg Fees09/06/2022Bill Nesbitt - BODBOD Mtg Fees09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Constabrowski BODBOD Mtg Fees09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	181.63 121.81 100.00 4.38 273.87 56.21 33.83 430.57 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
08/31/2022AmeriGasCloud Seeding08/29/2022Andy Spann BODBOD Mtg Fees08/29/2022Andy Spann BODBOD Mileage09/08/2022AnthemMedical Insurance09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Bill NesbittBOD Expenses08/29/2022Bill NesbittBOD Mtg Fees09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	121.81 100.00 4.38 273.87 56.21 33.83 430.57 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
08/29/2022Andy Spann BODBOD Mtg Fees08/29/2022Andy Spann BODBOD Mileage09/08/2022AnthemMedical Insurance09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/06/2022Bill NesbittBOD Expenses08/29/2022Bill Nesbitt - BODBOD Mtg Fees09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtleage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	100.00 4.38 273.87 56.21 33.83 430.57 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
08/29/2022Andy Spann BODBOD Mileage09/08/2022AnthemMedical Insurance09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/06/2022Bill NesbittBOD Expenses08/29/2022Bill Nesbitt - BODBOD Mtg Fees09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	4.38 273.87 56.21 33.83 430.57 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
09/08/2022AnthemMedical Insurance09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/06/2022Bill NesbittBOD Expenses08/29/2022Bill Nesbitt - BODBOD Mtg Fees09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison Materials LLCNFWF Phase II COST	273.87 56.21 33.83 430.57 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/06/2022Bill NesbittBOD Expenses08/29/2022Bill Nesbitt - BODBOD Mtg Fees09/11/2022Business Solutions LeasingCopier Expenses09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison Materials LLCNFWF Phase II COST	56.21 33.83 430.57 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
09/07/2022Atmos EnergyUtilities, Clean, Condo Dues09/06/2022Bill NesbittBODExpenses08/29/2022Bill Nesbitt - BODBOD Mtg Fees09/11/2022Business Solutions LeasingCopier Expenses09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison Materials LLCNFWF Phase II COST	33.83 430.57 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
09/06/2022Bill NesbittBODExpenses08/29/2022Bill Nesbitt - BODBOD Mtg Fees09/11/2022Business Solutions LeasingCopier Expenses09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison Materials LLCNFWF Phase II COST	430.57 100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
08/29/2022Bill Nesbitt - BODBOD Mtg Fees09/11/2022Business Solutions LeasingCopier Expenses09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison Materials LLCNFWF Phase II COST	100.00 242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
09/11/2022Business Solutions LeasingCopier Expenses09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	242.89 112.67 77.65 100.00 20.00 66.98 400.00 25.22
09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	112.67 77.65 100.00 20.00 66.98 400.00 25.22
09/01/2022City of Gunnison Finance Dept.Utilities, Clean, Condo Dues08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	77.65 100.00 20.00 66.98 400.00 25.22
08/29/2022Don Sabrowski BODBOD Mtg Fees08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	100.00 20.00 66.98 400.00 25.22
08/29/2022Don Sabrowski BODBOD Mileage08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	20.00 66.98 400.00 25.22
08/31/2022Fullmer's Ace HardwareOffice Supplies & Misc Expenses09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	66.98 400.00 25.22
09/01/2022GL Computer Service, Inc.Computer Repairs09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	400.00 25.22
09/01/2022Gunnison County vVehicle Expenses - Toyota Highl09/13/2022Gunnison Materials LLCNFWF Phase II COST	25.22
09/13/2022 Gunnison Materials LLC NFWF Phase II COST	
	284.9.5
09/02/2022 Gunnison Materials U.C. NEWE Phase II.C.O.ST. 2	-00
	751.43
09/02/2022 Gunnison Materials LLC NFWF Phase II COST	331.02
09/02/2022 Gunnison Materials LLC USFS 22-PA-11020400-050 1	,531.35
09/13/2022 Gunnison Middle School Public Ed./Advertising 2	,000.000
08/30/2022 Gunnison River Festival Postage	55.06
08/31/2022 Hartman Brothers, Inc. Cloud Seeding COST	28.99
08/31/2022 J&K Services Inc. Building Rep/Maint	560.00
08/29/2022 Jermaine's Meeting Expenses	0.00
08/29/2022 Jermaine's Meeting Expenses	0.00
08/31/2022 Jill Steele Medical Insurance	615.90
08/29/2022 Joellen Fonken BOD BOD Mtg Fees	100.00
08/29/2022 Joellen Fonken BOD BOD Mileage	6.25
09/05/2022 John McClow Medical Insurance	250.50
08/29/2022 John Perusek BOD Expenses	373.46
08/29/2022 John Perusek BOD BOD Mtg Fees	100.00
08/29/2022 Julie Nania BOD BOD Mtg Fees	100.00
08/29/2022 Julie Nania BOD BOD Mileage	37.50
08/31/2022 LexisNexis Internet	622.57
09/08/2022 LexisNexis Internet	622.57
08/29/2022 Michelle Pierce BOD BOD Mtg Fees	100.00
08/29/2022 Michelle Pierce BOD BOD Mileage	70.00
09/09/2022 Microsoft Computer Software	138.00
09/06/2022 Pinnacol Assurance Work Comp Ins	540.00
08/30/2022 QuickBooks Payroll Service Payroll Taxes	1.75
09/15/2022 QuickBooks Payroll Service Payroll Taxes	1.75
08/29/2022 Rebie Hazard-BOD BOD Mtg Fees	100.00
08/29/2022 Rebie Hazard-BOD BOD Mileage	36.88
09/14/2022 Renee Brekke Public Ed./Advertising	176.39
08/31/2022 RigNet Inc Cloud Seeding COST	34.95
08/29/2022 Rosemary Carroll - BOD BOD Mtg Fees	100.00
08/29/2022 Rosemary Carroll - BOD BOD Mileage	37.50
08/29/2022 Sara Bergstrom BOD BOD Mtg Fees	100.00
	² age 1

Upper Gunnison River Water Conservancy District Expenses For Approval (Paid & Payable) August 29 through September 15, 2022

Date	Name	Account	Amount
09/01/2022	Silver World Publishing	Public Ed./Advertising	80.00
08/29/2022	Stacy McPhail BOD	BOD Mtg Fees	100.00
08/29/2022	Stacy McPhail BOD	BOD Mileage	5.63
08/31/2022	The Paper Clip	Office Supplies & Misc Expenses	239.90
09/05/2022	UnitedHealthcare	Medical Insurance	103.90
09/09/2022	University Corp. for Atmospheric Research	Taylor River Modeling Exp	749.82
09/09/2022	University Corp. for Atmospheric Research	Taylor River Modeling Exp	185.55
09/09/2022	Weber Welding & Excavation	BLM Coop L17AC00255 COST	1,500.00
09/07/2022	Wilson Water Group	Watershed Mgmt X	1,812.50
Aug 29 - Sep	15, 22		18,959.30

AmeriGas - 0570 970-641-1571 www.amerigas.com





Page 1 of 1

	JNT NUMBER: E AMT DUE: ATE:	203133796 \$121.81 09/30/2022		INVOICE NO: 3140 NAME: SERVICE ADDRESS:	0577238 INVOI UPPER GUNNISON R IRWIN LODGE CRESTED BUTTE CO	
	ous Balance 889.18	Payments -\$865.61	Adjustments/Credits \$0.00	New Charges \$121.81	Account Balance Due \$121.81	Invoice Amount Due \$121.81
Accou Date	nt Activity Ref No.	Description			Quantity Price	Amount
08/31/2	2 705691192	Tank Rent-Fixed-1 08/01/2022 - 07/31 SITE:103383620 State Sales Tax County Sales Tax City Sales Tax Local Sales Tax 1	/2023 Date Mgr. Bd. / Pd. I	Appr. <u>GRC</u> Amt. Appr. DateBc	12.0	(\$111.34 \$3.23 \$1.11 \$5.02 \$1.11
		TOTAL NEW CHA		-Irwin R	ende.	\$121.81

Account Balance Due includes all outstanding charges for which we have not received payment and may not reflect payments sent.

MESSAGES

Č.

We periodically review and revise our standard Terms & Conditions. Visit our company website to read the T&C that apply. Effective July 15, 2020, the HazMat & Safety Compliance Fee is \$11.99 (where applicable). For more information, please visit the company's website to review our Terms & Conditions.

Contact Us: Billing, Service & Delivery: 970-641-1571 or www.amerigas.com/contact Pay Online or Enroll in our Automatic Payment program: www.amerigas.com

THANK YOU FOR YOUR BUSINESS!

AMERIGAS - 0570 CORRESPONDENCE ONLY PO BOX 45264 WESTLAKE, OH 44145

Amount Due Account No. Invoice No. Invoice Date Due Date 203133796 3140577238 08/31/2022 09/30/2022 \$121.81

TOTAL AMOUNT ENCLOSED \$

AutoPay is enabled on your account. Your amount due will be paid automatically on the due date.

Account or user address change? If yes, please check box and complete reverse side.

UPPER GUNNISON RIVER DIST 210 W SPENCER AVE **GUNNISON CO 81230-2543**

REMIT PAYMENT ONLY PO BOX 660288 DALLAS TX 75266-0288

020313379600031405772380000000121810

23625 Uncompahgre Road Montrose, CO 81403

Bill To

(a)

Upper Gunnison River Water Cons Dist 210 West Spencer, Suite B Gunnison CO 81230

Invoice

Date	Invoice #		
9/2/2022	22-836		

Approved by C.Cwelich

Budget Line Item: Wet Meadows

Grants: NFWF Phase II: \$2,751.43

			Project / PO	Terms
			Pine Crest Miller	Net 30
Quantity	Description	U/N	A Price Each	Amount
1	Rip Rap McCabe Lane Wet Meadows Restoration Mix Date Rec, Addn. Ckd. Mgr. Appr. SQC_Amt. Appr. 5.2, 751.33 Bd. Appr. Date Bd. Initials Pd. Date Ck# Account(s) Ck#	ton	2,751.43	2,751.43
			Sales Tax (0.0%)	\$0.00
			Total	\$2,751.43
Phone #	E-mail			
	zane@rockymountainaggrega			

23625 Uncompanyer Road Montrose, CO 81403

Bill To

Upper Gunnison River Water Cons Dist 210 West Spencer, Suite B Gunnison CO 81230

Invoice

Date	Invoice #
9/2/2022	22-837

Approved by C.Cwelich

Budget Line Item: Wet Meadows

Grants: NFWF Phase II: \$331.02

			Project / PO	Terms
			Miller Ranch	Net 30
Quantity	Description	U/M	Price Each	Amount
	6" Sub Base - McCabe Pit Wet Meadows Mix Fuel Surcharge on Aggregate Production Date Rec. Addin. Ckd. Mgr. Appr. Scc. Amt. Appr. 1337.02 Bd. Appr. Date Bd. Imitials Pd. Date Ckat	ton ton	8.50	
			Sales Tax (0.0%)	\$0.0
			Total	
			Total	\$331.0
Phone #	E-mail			\$331.(

23625 Uncompahgre Road Montrose, CO 81403

Bill To

. *

-

Upper Gunnison River Water Cons Dist 210 West Spencer, Suite B Gunnison CO 81230

Invoice

Date	Invoice #
9/2/2022	22-838

Approved by C.Cwelich

Budget Line Item: Wet Meadows

Grants: USFS 22-PA-11020400-050: \$1,531.35

				Project / PO	Terms
				Black Sage Pass	Net 30
Quantity	De	scription	U	M Price Each	Amount
29.88 29.88	Rip Rap McCabe Lane Wer Fuel Surcharge on Aggrega Date Rec. Mgr. Appr. Bd. Appr. Date Pd. Date Account(s)	Aden. Ckd. SRC_Amt. Appr. 24.5. Bd. Initials	ton ton		0.00 1,494.00 37.3:
				Sales Tax (0.0°	%) \$0.0
				Total	\$1,531.3
		E-mail			
Phone #		E-1131			

23625 Uncompanyer Road Montrose, CO 81403

Invoice

Date	Invoice #
9/13/2022	22-885

Bill To

Upper Gunnison River Water Cons Dist 210 West Spencer, Suite B Gunnison CO 81230 Approved by C. Cwelich

Budget Line Item: Wet Meadows

Grant Source: NFWF Phase II

					Project / PO	Terms
					LP Ranch	Net 30
Quantity	De	scription	U/	/м	Price Each	Amount
5.56 5.56	Rip Rap McCabe Lane Fuel Surcharge on Aggrega Date Rec. Mgr. Appr. SR Bri Appr. Date Pd. Date Account(s)	Aden. Ckd. Aden. Ckd. Amt. Appr. 2084.9 Bd. Initials Ckd	ton ton		50.00	
				Sale	es Tax (0.0%)	\$0.00
				To	tal	\$284.95
Phone #		E-mail]		
970-641-4042		zane@rockymountaina	ggregate.com]		



Hartman Brothers, Inc. 524 North First Street Montrose, CO 81401 Tel.: (970) 240-8535 Fax: (970) 249-6675



STATEMENT OF ACCOUNT

 Customer : M05447
UPPER GUNNISON RIVER WATER CON
210 WEST SPENCER AVE., SUITE B
GUNNISON, CO 81230

Statement Date Aug 31, 2022

Payment Terms NET 30 DAYS

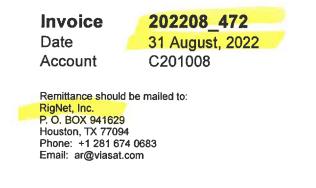
Date T Invoice Delivery Note Payment Amt. Balance Customer P.O. No. Inv./Credit Amt. M Y D 2022/08/31 D 378631 28.99 28.99 Date Rec. Aden, Ckd Mgr. Appr. SRC Amt. Appr. 3 Bd. Appr. Date Bd. mitials S Pd. Date Ck# Account(s) TOTAL ----> 28.99 0.00 28.99 I - INVOICE D - CYLINDER RENTAL L - CYLINDER LEASE C - CREDIT NOTE CODES (T) : U - UNAPPLIED CREDIT S - FINANCE CHARGE F - MONTHLY FACILITY R - MACHINE RENTAL 90 DAYS 90+ DAYS CURRENT 60 DAYS 61 -

 28.99
 0.00
 0.00
 0.00



 \mathbf{e}_{i_1}

Upper Gunnison River Water Conservancy District 210 W. Spencer Ave Suite B Gunnison, CO 81230 United States



Airtime Period 1 Aug - 31 Aug 2022

Summary		
Total Airtime and Fees this Period	USD	34.95
Total Amount This Invoice	USD	34.95

Terms: Net 30

Please include Invoice Number and Account Number with your payment

For Wire Transfers, please remit to: Bank Name: Bank of America Acct Name: RigNet, Inc. Account No: 488025116355 SWIFT # BOFAUS3NABA Routing # 026009593ABA ACH# 111000025

Pay Online: https://www.rig.net/payment-center

Summary per Product

ProductCharge TypeAmount (USD)OrbCommIDPSubscription Fee33.00



UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

UCAR / NCAR / UOP PO BOX 3000, Boulder, CO 80307-3000 U.S.A. Phone (303) 497-2130 Fax (303) 497-8579 E-mail: ar@ucar.edu

UPPER GUNNISON RIVER WATER CONSERVANCY DISTRICT 210 WEST SPENCER AVENUE

TO SUITE B GUNNISON

CO 81230

Customer # C64161 Invoice # IN222331 Date: 09/09/2022

DESCRIPTION		AMO	UNT
Salaries	0.		57.70
Benefits			31.45
Computer Service Center			7.67
Overhead			50.73
Fee			38.00
Agreement No. 20220478 Expenses 8/1/2022-8/31/2022 Addin. Ckd	10 FE		
Date RecAden. Oke Mgr. Appr Mgr. Appr Bd. Appr. Date Bd. initials_g Pd. Date Ck# Account(s)	<u>85.5</u> 5		
Terms are NET 30. Finance charges are 15% per annum for each 30 day Period, or portion thereof, that payment is overdue.	TOTAL AMOUNT DUE	USD	185.55

Detach and return this portion with your payment

TID# 84-0412668

Invoice # IN222331 Date: 09/09/2022 Amount Enclosed: _____

> To pay via check, please make payable to: University Corporation for Atmospheric Research PO Box 3000 Boulder CO 80307-3000 USA To pay via ACH or Wire, please email ar@ucar.edu for bank information





UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

UCAR / NCAR / UOP PO BOX 3000, Boulder, CO 80307-3000 U.S.A. Phone (303) 497-2130 Fax (303) 497-8579 E-mail: ar@ucar.edu

UPPER GUNNISON RIVER WATER CONSERVANCY DISTRICT 210 WEST SPENCER AVENUE

TO SUITE B GUNNISON

CO 81230

INVOICE

Customer # C64161 Invoice # IN222319 Date: 09/09/2022

DESCRIPTION	AMOUNT
Salaries Benefits Computing Service Center Overhead	284.00 154.78 61.37 249.67
Task Order Agreement No. 20220238 Expenses 8/1/2022-8/31/2022 Date Rec. Addin. Ckd. Mgr. Appr. Skc. Mgr. Appr. Bd. Initials Bd. Appr. Date Bd. Initials Pd. Date Ckd:	
Terms are NET 30. Finance charges are 15% per annum for each 30 day TOTAL Period, or portion thereof, that payment is overdue. DUE	USD 749.82

Detach and return this portion with your payment

TID# 84-0412668

Invoice # IN222319 Date: 09/09/2022 Amount Enclosed: _____

> To pay via check, please make payable to: University Corporation for Atmospheric Research PO Box 3000 Boulder CO 80307-3000 USA To pay via ACH or Wire, please email ar@ucar.edu for bank information



INVOICE



Invoice# 2022-155 DATE: Sep 09, 2022 Billing Date: September 8th, 2022 - September 8th, 2022

BLM

Addn. Ckd

Bd. Initials 5m

Budget Line Item: Wet Meadows

Amt. Appr.

Clat headous

417

Grant Source: BLML17

Approved by C. Cwelich

Date Rec.

Mgr. Appr.

Pd. Date

Bd. Appr. Date

21000 hwy 550 Ridgway, Colorado, 81432 Email: wwellc2015@gmail.com

Bill To: Account(s) Upper Gunnison River Watershed Conservancy District

Gunnison, Co

WWE llc Billing Summary

Reciepts:

\$0.00 Line Items: \$1500.00

DESCRIPTION

Log Date: Sep 09, 2022 -

Client: Upper Gunnison River Watershed Conservancy District

Line item 1: (1) 6" parshall flume

Total: \$1500.00

AMOUNT

\$1500.00

Check all/Uncheck all

Comments: Thank you for the business!

Make all checks payable to WWE LLC Please include invoice number on check

This invoice generated by Time Log Solutions

Approved for payment - BAR 9/12/22. Please charge to budget line item 47 Basinwide Planning - Watershed Management Planning

September 7, 2022

SRC wilsonwoter

Sonja Chavez, General Manager Upper Gunnison River Water Conservancy District 2010 West Spencer, Suite B Gunnison, CO 82130

RE: Invoice #14 - Upper Gunnison Watershed Management Planning Contract UG2020-006

Sonja,

Below is an invoice for professional services of Wilson Water Group for the WMP in the Upper Gunnison River Basin through August 25, 2022. Primary activities and progress reports follow the invoice.

Staff	Hours	Rate	Total
Erin Wilson	8.5	\$ 200	\$ 1,700.00
Tammi Renninger (ElephantFish)	1.5	\$75	\$ 112.50
Amount Due this Invoice			\$ 1,812.50

Professional Services

Project Accomplishments

Task 6 – Project Coordination

- Participated in 2 calls with Sonja and John to prepare for September Board Meeting presentation
- Updated WMP presentation materials to include information about pre- and post-compact use and augmentation plans

Activity Anticipated for September 2022

Task 6 – Project Coordination

- Participation in coordination call to finalize Board Meeting Presentation,
- Present to UGRWCD Board on September 26

Budget Summary

Task	Budget	Month Costs	Cumulative Costs	Contra Balanc	
1. Data Compilation	\$ 15,860	\$ -	\$ 15,837.50	\$	23 Complete
2. Current Use Assessment	\$ 9,710	\$-	\$ 9,700.00	\$	10 Complete
3. Infrastructure/Reach Assess	\$ 10,300	\$ -	\$ 10,265.00	\$	35 Complete
4. Water Rights Model Update	\$ 6,420	\$ -	\$ 1,507.50	\$ 4,	913 12/31/2022
5. Final Report	\$ 10,550	\$ -	\$ 9,351.25	\$ 1,	199 12/31/2022
6. Project Coordination	\$ 13,020	\$ 1,812.50	\$ 13,257.80	\$ (2	238) 12/31/2022
Total	\$ 65,860	\$ 1,812.50	\$ 59,919.05	\$ 5,	941 12/31/2022

AGENDA ITEM 4 2023 Budget

MEMORANDUM

TO:Board of DirectorsFROM:Jill Steele, AccountantDATE:September 19, 2022SUBJECT:2023 Draft Budget



Hello, All,

The Finance Committee of the UGRWCD will meet Tuesday, September 20 at 11:00 a.m. One of the topics for discussion is the 2023 budget. Since there have been quite a few changes to the budget format, along the lines of the changes you have seen to the financial reports this year, we thought it would be more efficient to send you the budget separately, after the Finance Committee meets.

I will see you all on the evening of the 26th.

Thank you,

leer

Jill



SNOW & AVALANCHE

Jeff Deems Laurna Kaatz Dave Kanzer Frank Kugel Art Mears Keith Roush Tom Ryan Heidi Steltzer Martha "Marti" Whitmore

Colorado Dust-on-Snow Program Water Year 2023 Funding Request

To:	Upper Gunnison River Water Conservancy District Attn: Sonja Chavez
Date:	August 31, 2022
From:	Center for Snow and Avalanche Studies
Contact:	Jeff Derry - Executive Director, CSAS office (970) 387-5080 cell (970) 231-6595
Ref:	Proposed Colorado Dust-on-Snow (CODOS) Program Services for WY 2023

Program Summary

The Center for Snow and Avalanche Studies (CSAS), based in Silverton, conducts the Colorado Dust-on-Snow program (CODOS) at its Senator Beck Basin Study Area (SBB) at Red Mountain Pass and at ten additional sites located throughout the Colorado Mountains. Desert dust transported from adjacent arid regions is deposited on the Colorado snowpack, drastically altering spring runoff and storage of water in mountain snow. It has been estimated that the snowmelt season in Colorado is ending twenty-five to fifty days earlier than in years prior to receiving dust that is found in our snowpack today. The primary result is snowmelt contributed streamflow occurs earlier in the season with periods of higher discharge rates and less overall snowmelt volume. With changing climate and increased development in the Desert Southwest, aridification and dust transport will continue to be a major driver of change.

CODOS is an applied science program that serves the mountain science community and regional resource managers by hosting and conducting interdisciplinary research and sustaining integrative 24/7/365 mountain systems monitoring. Weather, snowpack (dust), radiation, soils, plant communities and hydrologic signals of regional climate trends are among the vast array of data collected, providing one of the highest elevation continuous and comprehensive mountain system dataset available.

Jeff Derry Executive Director

Mail:

P.O. Box 190 Silverton, CO USA 81433

Center:

1428 Greene Street Suite 103 Silverton, CO

Telephone: Office: (970) 387-5080 Cell: (970) 231-6595

Website: www.snowstudies.org

Email: jderry@snowstudies.org

CODOS Products and Activities

- Update and Dust Alert products, based on our site-specific observations of snowpack and duston-snow conditions at all CODOS sites, are posted to the CODOS website (http://www.codos.org/#codos) and/or provided directly to your office via email. The record of CODOS program products has grown over the years. Site-specific reference pages contain archived CODOS products, including all prior Updates, Alerts, and other data analyses for your quick, one-stop reference.
- CODOS WY2023 Updates will be published to the CODOS program website at timely intervals throughout the winter and spring, describing conditions at SBB and the other ten CODOS sites (listed below). CSAS will perform fieldwork at these sites documenting dust-on-snow layers and other snowpack conditions, monitor associated SNOTEL sites, and evaluate regional hydrologic data. These time series of observation-based analyses are performed at each site during 3 or 4 circuits of this network each spring, depending on dust events and snowcover duration. CODOS will contact program participants and other local observers for dust event observations. CODOS will iteratively evaluate SWE, dust-on-snow, and spring weather conditions in order to identify prior CODOS period of record hydrologic patterns in dust-enhanced spring runoff behavior. Occasional e-mail Dust Alerts will provide "heads up" notifications regarding anticipated or actual dust deposition events already in progress. CSAS will also provide time-to-time e-mail and phone briefings to agency personnel, tailored to their watersheds. CODOS/CSAS also receives numerous queries from local, regional and national/international media regarding dust-on-snow conditions, research, and impacts, and responds to those as feasible and appropriate.
- Ongoing and new research initiatives are also pursued, in support of CODOS's primary purposes. During WY2023, CSAS/CODOS will continue its close collaboration with the U.S. Geologic Survey in Denver, in support of their dust research program on the Colorado Plateau. That program seeks to better understand the sources of dust emission on the Plateau as well as the physical properties of dust and effect of those properties on snowmelt. CODOS will continue our dust-on-snow sampling efforts and work with USGS in developing their Colorado Plateau research. USGS processes our mass loading samples at no cost to CODOS. This past year we discovered microplastics in the snow samples going back to 2011, opening a whole new avenue of inquiry of impacts on or mountains and water supply.
- This year the USGS thru the Next Generation Water Observing System (NGWOS) deployed a variety of sensors including a snow water equivalent scale at the SBB 12,200' monitoring site. This is being done at a variety of sites in the Upper Colorado Basin. What makes this deployment unique is CSAS has been collecting these variables for nearly 20 years, hence when these new sensors report the near real-time data we will know if it is a high/average/low value, making it immediately useful and applicable for water managers.
- A very exciting project started in WY2017. Zoe Courville with the Cold Regional and Research Engineering Laboratory (CRREL) began a 5-year project titled "Dark Materials in Snow and Their Impacts on Preferential Sublimation and Surface Roughness". This project includes a lot of sampling and time spent at SASP. It involves some really interesting stuff; dust, microbes, surface roughness and albedo, sublimation, and how this information can better inform remote detection methods.

Stephen Fassnacht with CSU and his students continue to monitor wetlands near Swamp Angel Study Plot. The project is titled "Determining the Contribution of High-Elevation Wetlands to Baseflow in the Senator Beck Basin, Colorado." The researchers are characterizing wetland locations near SASP, by measuring water levels and specific conductance and by incorporating CSAS's snowpack and streamflow data, to determine contribution of wetlands on downstream flow. Wetland/streamflow relationships, particularly the influence of wetlands on variations in baseflow, will be important for downstream water managers, researchers, and stakeholders to understand water quality and the quantity of water available in streams in late summer.

These ongoing research support activities compliment the primary focus of CODOS in the coming year – providing more information about our Colorado snowpack and increasing our information about dust-on-snow and how these conditions will influence snowmelt and spring runoff conditions in watersheds throughout the state.

Facilities

Based out of Silverton, CSAS operates a comprehensive Mountain System Monitoring (MSM) program at SBB just above Red Mountain Pass, employing extensive instrumentation and other infrastructure, and rigorous field observations. CODOS is an integral element of the MSM program serving as the program's primary sentry site where the most intensive dust-on-snow monitoring, sampling, and measurements occur. SBB is a headwater catchment of Red Mountain Creek and the Uncompahgre River and is immediately adjacent to headwaters of the Animas and San Miguel river watersheds. SBB is also just 13 miles northeast of headwaters of the Dolores River and 16 miles northwest of the headwaters of the Rio Grande River.

WY 2023 Funding Request

With this proposal CSAS requests that the Upper Gunnison River Water Conservancy District sustain its support for CODOS at the \$3,500 level this year. The CODOS program depends on equitably shared support from Colorado's water supply management agencies, and CSAS and our other CODOS program funders greatly appreciate your organization's vital past support. Please see funding requests pending or already awarded (below) as we approach WY2023, illustrating how funding from each program participant is essential to our operating budget.

With the COVID pandemic creating a budget crisis for the state of Colorado, a large share of CSAS' typical grant support through the Colorado Water Conservation Board (CWCB) was absent the last few years. Fortunately, we received a PPP loan that helped meet our budget needs. And starting this year we are pleased to announce a 4-year WSRF grant awarded to the CODOS Program. This award is for \$60/year and will go a long way in stabilizing our budget. The grant would not have been possible without the overwhelming support of Colorado Basin Roundtables. Thank You!

CODOS Monitoring Sites

The following dust-on-snow monitoring sites are located close to NRCS SNOTEL sites and are referred to by the adjoining SNOTEL site name. As in years past, CODOS sites in WY2023 are:

- Senator Beck Basin Study Area
- Park Cone
- Spring Creek Pass
- Wolf Creek Pass
- Hoosier Pass
- Grizzly Peak
- Berthoud Summit
- Willow Creek Pass
- Rabbit Ears Pass
- McClure Pass
- Grand Mesa Skyway

Water Year 2023 Requested Funding

The following table presents a roster of CODOS funding requests to agencies for WY2023. An additional list of funding proposals pending in support of CSAS's Mountain System Monitoring program and SBB operations is also shown. These additional funds are also essential to sustain SBB infrastructure and CSAS operations.

CODOS Program Funding	Requested WY 2023
Bureau of Reclamation – Lower Colorado Region	10,000
Bureau of Reclamation – Western Colorado Area Office	13,000
City of Grand Junction	2,500
Colorado River Water Conservation District	25,000
Colorado Water Conservation Board - WSRF	60,000
Denver Water – Raw Water Supply	10,000
Dolores Water Conservancy District	1,000
Rio Grande Water Conservation District	5,000
San Luis Valley Water Conservancy District	1,000
Southwestern Water Conservation District	7,000
Tri-County Water Conservancy District	5,000
Upper Gunnison River Water Conservancy District	3,500
Total CODOS Support	143,000
Additional proposed MSM Program and SBB Operating Support	
Denver Water – Climate Change Program	5,000
Friends of CSAS – private contributions	4,000
Grand Mesa, Uncompany and Gunnison National Forest	3,000
Research User Fees	12,500

From:	Skeie - DNR, Erik
To:	Beverly Richards
Subject:	Re: Funding Request from Upper Gunnison
Date:	Tuesday, September 13, 2022 12:39:26 PM

We are ready to go for 2023 snow on flights for East and Taylor, so you'd be matching funds with us and the Department of Energy through the UC Berkeley Lab.

To give you the quick breakdown, we're looking to do 4 flights for each the East and Taylor.

Total Cost: \$491,708.52 DOE/UC Berkeley Match: \$218,457 CWCB FY22 Carryover: \$143,000

Remaining to fund: \$130,251.52

Anything you can contribute would be greatly appreciated, and we'll cover the remaining amount.

Erik Skeie Special Projects Coordinator Interstate, Federal & Water Information Section



O 303-866-3441 x3260 | C 303-956-1791 1313 Sherman St., Rm. 718, Denver, CO 80203 erik.skeie@state.co.us | cwcb.colorado.gov





September 19, 2022

Upper Gunnison River Water Conservancy District Attention: Board of Directors 210 W. Spencer Avenue, Suite B Gunnison, Colorado 81230

Subject: 2023 Funding Request from the Coal Creek Watershed Coalition

Dear Members of the Upper Gunnison River Water Conservancy District Board:

The Coal Creek Watershed Coalition (CCWC) is extremely grateful for the Upper Gunnison River Water Conservancy District's (UGRWCD) generous support of our organization in 2022. UGRWCD's Watershed Coalition Support Funds, \$10,000.00, were matched with nearly \$135,000.00 from other partners. In 2022 CCWC continued water quality monitoring in the Coal Creek Watershed, assisted the Town of Crested Butte and County to evaluate water quality issues associated with the Keystone Mine, and continued community outreach and education efforts. UGRWCD's funding is critical to CCWC's success. In 2023, CCWC proposes to use UGRWCD Watershed Coalition Support Funds for the following:

- Grant Writing and Fundraising: CCWC has limited funding to secure grants to support projects to improve water quality and watershed health. Funds provided by the UGRWCD would be used to secure grants from local, state, and federal agencies; and to increase donations. In 2023, our fundraising efforts will focus on the Gossan Restoration Project. CCWC requests \$3,500 for grant writing and fundraising.
- Long-term Water Quality Monitoring Program: CCWC would like to use funds from the UGRWCD to fund staff time and purchase supplies for our water quality monitoring programs. These funds would be matched, with approximately \$40,000 in additional funds, through existing partnerships. CCWC requests \$4,000 from the UGRWCD to support water quality monitoring.
- Administrative Duties: As the diversity and geographic scope of CCWC's projects increase so do
 our administrative duties. Administrative funds would be used for meeting facilitation, website
 maintenance, and project development. CCWC requests \$5,000 from the UGRWCD to support
 administrative duties.

CCWC's request for 2023 totals \$12,500.00. CCWC appreciates the support from the UGRWCD. I am happy to answer any questions you may have regarding CCWC's activities. We look forward to sharing our annual report with the UGRWD later this year.

Sincerely,

Ashley Bembenek Executive Director Coal Creek Watershed Coalition 970-251-0029

AGENDA ITEM 5 BREAK

AGENDA ITEM 6

John McClow & Sonja Chavez (UGRWCD) and Erin Wilson (Wilson Water Group) present Upper Gunnison Basin Hydrology, Compact Risk, & UGRWCD Risk Reduction

AGENDA ITEM 7

Conversation with Kevin Rein, State Engineer and Director of the Division of Water Resource, Colorado Water Conservation Board

AGENDA ITEM 8

Legal and Legislative Matters

AGENDA ITEM 9 General Manager Update

AGENDA ITEM 9 Treasurer's Report

MEMORANDUM

TO: UGRWCD Board of Directors

FROM: Sonja Chavez, General Manager

DATE: September 19, 2022

SUBJECT: General Manager Updates (September)



I. Treasurer's Report

II. General Manager's Report

A. Miscellaneous Updates

A.1 Upper Gunnison Basin Cloud Seeding Program

The District distributed a letter to existing and proposed new partners for the Upper Gunnison Basin Cloud Seeding Program (Exhibit A). Purpose was to raise additional funding in support of the expanding program.

A.2. Gap Weather Radar Update

The UGRWCD submitted a letter of comment to the Gunnison Board of County Commissioners in support of the Gap Weather Radar site on Black Mesa (see attached).

A.3. Harmful Algal Bloom Grant Request to the Community Funding Partnership (CFP)

The UGRWCD was successful in securing a CFP award in the amount of \$41,018 in support of the US Geological Survey and National Park Service Harmful Algal Bloom study. This award makes the funding package for the project complete.

B. Watershed Management Planning (WMP) Update

There was no meeting of the WMP Committee this month. There was no meeting of the WMP. Staff will give their quarterly update at the October meeting.

C. Education & Outreach Committee (E/O) Update

There was no meeting of the E/O Committee this month. Staff will give their quarterly update at the October meeting.

D. Taylor Local Users Group (TLUG) Taylor Local Users Group

There was no meeting of the TLUG this month. The group kept with their August plan to reduce flows by 25 cfs every 24 hours beginning the evening of September 5th until reaching the estimated winter flow rate of 83 cfs.

E. Wet Meadows Update

There are no significant Wet Meadow Program updates this month. Staff will give their quarterly update to the Board at the October meeting.

F. In Stream Flow Calls

F.1. Slate River (From Commissioner Rozman 09-16-22): The CWCB requested administration of their Slater River ISF water right on September 2nd. Over the past two weeks, I administered the 11 augmentation plans activated by this call. The largest augmentation releases were 7.5 acre feet from Meridian Lake aka Long Lake for the UGRWCD's basin-wide augmentation plan and 4 acre feet from Meridian Lake Park Reservoir No.1 for MTCBW&S's operations. Thanks to both those organizations for making timely releases. A combination pond releases head gate bypass and dry-up credits from the other augmentation plans added another 0.5 acre feet to the Slate River. There will likely be another round of reservoir releases next month if the monsoons don't return.

The Breem Ditch Washington Gulch ISF water right is for 0.25cfs for the month of September and has been completely satisfied all month.

F.2. Lake Fork (From DNR, Ryan Unterreiner): Release of 5 cfs to maintain 35 cfs In Stream Flow beginning 9/19/22 and continuing through September. This equates to 109 AF of their 200 AF pool in Lake San Cristobal.

G. Miscellaneous Board Member Updates



Exhibit A

Upper Gunnison River Water Conservancy District

September 19, 2022

Dear Upper Gunnison Cloud Seeding Stakeholders,

The Upper Gunnison River Water Conservancy District (District) is writing today to inform your agency/organization of a proposed expansion of the Upper Gunnison Basin Cloud Seeding Program (Program) beginning this fall of 2022 and to ask for your annual financial support. Cloud seeding is one of the cheapest forms of augmentation water for our basin (\$0.53 per acre-foot) and can provide critical water that supports Gunnison River basin flows, Blue Mesa Reservoir and our local economy.

As background, the Upper Gunnison Basin Cloud Seeding Program was started by Gunnison County in the 2002-2003 winter season as a response to significant drought conditions occurring throughout our watershed. North American Weather Consultants (NAWC) was selected as the contractor and continues to work with the District to carry-out this important Program.

The current Program involves the use of 15 cloud seeding generators (Figure 1. Green pins) including a remote seeding generator located at Lake Irwin. As of April 1, 2022, SNOTEL sites in the Upper Gunnison River Basin reported snowpack water content ranging from about 79 percent to 123 percent of average and precipitation ranged from 83 percent to 129 percent in the basin. Based upon analysis, NAWC estimates a 7 to 12 percent increase to the basin's April 1st water content associated with the cloud seeding sites, which falls within the 5 to 15 percent increase estimated by the Weather Modification Association.

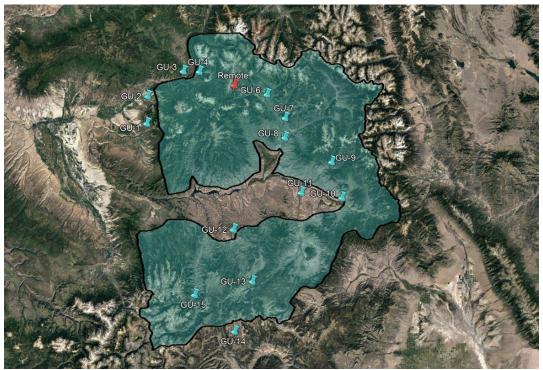


Figure 1. Generator Sites for Upper Gunnison Cloudseeding Program
210 West Spencer Avenue, Suite B • Gunnison, Colorado 81230
Telephone (970) 641-6065 • www.ugrwcd.org

An additional *manual* generator (Figure 1 above, red pin) was installed on Black Mesa in the 2021-22 season, just north of Blue Mesa Reservoir; however, there were accessibility and volunteer operational issues, therefore this site has become a candidate for a new remotely operated cloud seeding generator and has been a long desired addition.

The District and NAWC believes a remote generator placed at Black Mesa will do more than any other program enhancement, in terms of water augmentation benefits in other portions of the Gunnison Range and importantly to Blue Mesa Reservoir and as shown in Figure 2 below. NAWC analysis indicates that the generator will have significant direct benefits to northern and southern tributaries to Blue Mesa Reservoir and to eastern tributaries due to positive downwind cloud seeding impacts.

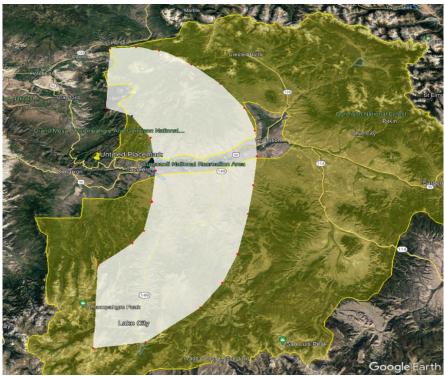


Figure 2. Area of impact from the proposed new remote generator at Black Mesa (in white).

The remote generator would permit cloud seeding during almost all storm periods that impact the Upper Gunnison River watershed. Seeding could occur during periods with winds ranging from northerly to southerly. Additionally, as this generator would be located at 9,500 feet, it will be in-cloud, meaning that 100% of the seeding solution released will make it into the storm system. The generator will be well above any inversions that occur during the winter months, and uninhibited in its ability to seed storm systems. The Remote Generator also releases 2-4 times the concentration of seeding solution as our manual generators, greatly augmenting the impact of a single site location.

Due to these significant benefits, our Board of Directors (with financial assistance from the Colorado Water Conservation Board) made the important decision to fund the initial set-up and infrastructure costs associated with a *remotely* operated cloud seeding generator on Black Mesa in the amount of approximately \$67,600. The proposed costs for fabrication and first-year installation for the remote generator at the Black Mesa site are provided in the Table 1 below.

Line Item	Description	Unit Price	Total
1	Remote Generator Fabrication	\$40,000	\$40,000
2	Meteorological and Technical Support (approximate)	\$1,500/month	\$9,000
3	First-year Remote Generator Set-Up	\$12,000	\$12,000
4	Project Take-Down (if needed)	\$3,000	\$3,000
5	Estimated Remote Generator usage (80 hours)	\$45/hour	\$3,600
6	Maintenance (all parts warrantied for first 12 months)	\$0	\$0
Totals	Initial Fabrication and Set-Up		\$67,600
	Commitment from CWCB		(\$25,000)
	UGRWCD Commitment		\$42,600

Table 1. Cost of Fabrication and Initial Set-up of Remote Generator at Black Mesa

The success of our Program is due to our strong community partners and while the District is not asking for additional funding in support of the Black Mesa installation and infrastructure, we are seeking <u>new</u> **annual financial contributors** to help support our expanding Program.

Table 2 summarizes our 2022-23 annual operation and maintenance costs with the new Black Mesa remote generator.

Line	Description	Description Unit Price							
Item									
1	Priority Set-up	\$15,000	\$15,000						
2	Monthly Fixed Costs – 5 months	\$11,550	\$57,750						
3	O & M of Lake Irwin Remote Generator – 5 Months	\$1,600	\$8,000						
4	Project Take-Down	\$7,800	\$7,800						
5	Project Final Report	\$5,000	\$5,000						
6	Estimated Generator Use – 2,400 hrs/\$11 hour	\$11.00	\$26,400						
Totals			\$119,950						

Table 2. Estimated annual program costs for the 2022-23 season with the new Black Mesa site.

Table 3 below identifies our existing and proposed new annual financial partners and their contributions.

Existing Financial Partners	Contribution Amount
Gunnison County	\$10,000
Gunnison County Stockgrowers	\$250
Vail Resorts	\$2,000
East River Sanitation District	\$2,000
City of Gunnison	\$2,000
Town of Mt. Crested Butte	\$3,000
Mt. Crested Butte Water and Sanitation	\$2,000
Antelope Hills Water	\$500
Dos Rios Water System	\$2,000
Colorado Water Conservation Board	\$67,000
Upper Gunnison River Water Conservancy District	\$23,210
Subtotal:	\$113,960

Table 3. Existing and Proposed Financial Partners.

Proposed New Financial Partners	Proposed Contribution Amount
Town of Crested Butte	\$2,000
Hinsdale County	\$500
Saguache County	\$500
Met Rec District	\$500
Gunnison Nordic	\$500
1% Open Space	\$500
Crested Butte Avalanche Center	\$500
Uncompahgre Valley Water Users	\$500
Colorado River District	\$2,000
Subtotal:	\$7,000
GRAND TOTAL (2021-2022)	\$121,460

In closing, the Upper Gunnison Basin Cloud Seeding Program is requesting your support for continued operation and expansion of our Upper Gunnison Basin Cloudseeding Program. This program augments our local and regional water supplies with direct benefits to all downstream water users, protects local water uses and water rights, and supports our local, regional and state economies. We greatly appreciate our on-going Program partners and look forward to working with new partners.

The District hopes that you will give this request your serious consideration. If you have any questions, please feel free to contact me by emailing me at <u>schavez@ugrwcd.org</u> or calling (970) 641-6065.

Sincerely,

Sonja Chaves

Sonja Chavez, General Manager

Exhibit B

September 13, 2022

Gunnison County Land Use Planning Department 221 N. Wisconsin Street Gunnison, Colorado 81230

Dear Ms. Sabbato,



The Upper Gunnison River Water Conservancy District is writing to express our strong support for the installation of a local gap weather radar station on Big Mesa in Gunnison County, Colorado.

A significant portion of our Colorado River headwaters are covered by mountain peaks over 10,000 feet that obstruct existing weather radar systems. Gap radar is important for water management entities like the Upper Gunnison District, Colorado River District, Colorado Water Conservation Board, Upper Colorado River Commission, U.S. Bureau of Reclamation, and others to understand, monitor, and adapt to climate variability extremes. This includes acquisition of weather data in support of hydroclimatic monitoring networks that help estimate snowfall, river flows, cloud seeding opportunities, and national hydrologic research efforts. These include research and studies being conducted by the Department of Energy, National Center for Atmospheric Research (NCAR), University of Colorado Atmospheric Research (UCAR – WRF Hydro Model), and Department of Interior (United States Geological Survey, Next Generation Water Observing Systems) where the Upper Gunnison and Colorado River Basins in Colorado were identified as a national priority in 2020. Gap radar data also greatly supports refinement of river inflow forecasting models for our federal reservoirs (Aspinall Unit), drought planning, flood forecasting, and avalanche danger predictions. Finally, it also provides critical information that supports our local economies including localized weather data that benefits agricultural practices, ski area operations, tourism, snow plowing operations, airport services, and emergency services like wildland fire fighting, highway patrol, ambulance services, and flight for life.

In closing, we remind residents and commissioners that the Colorado River Basin and the western U.S. are currently in crisis due to on-going aridification. We need accurate and reliable weather data to support our local and regional water resource management planning efforts and we ask that you approve installation of a gap weather data site on Big Mesa, Gunnison County, Colorado.

Sincerely,

Sonja Chaver

Sonja Chavez, General Manager Upper Gunnison River Water Conservancy District

AGENDA ITEM 9 Scientific Endeavors

AGENDA ITEM 9 STOR Committee Update

AGENDA ITEM 10 Miscellaneous Matters

Monthly Energy Production Report

UGRWCD

Gunnison, CO

This report provides energy production for September.

Week	Peak Power	Energy Produced
09/01/2022 - 09/07/2022	5.92 kW	290 kWh
09/08/2022 - 09/14/2022	5.92 kW	256 kWh
09/15/2022 - 09/21/2022	5.92 kW	157 kWh
09/22/2022 - 09/28/2022	0 W	0 Wh
09/29/2022 - 09/30/2022	0 W	0 Wh
September 2022 Total:		703 kWh
Previous Month Total:		1.13 MWh
Year to Date:		9.03 MWh
Lifetime Production:		34.8 MWh

Your Carbon Offset for this month: 1,100.0 lbs

You have offset the equivalent of: 8 Trees



!

Browser not supported

Use Microsoft Edge, Google Chrome, Firefox or Safari to access the fresh new look of MyEnphase with the exciting new features.

Ok, Got It

9 <---- Month to Summarize (change this number to look at a different month)

PRELIMINARY - SUBJECT TO REVISION

то

Daily Summary for Month --> Sep

							Taylor Park Reservoir																		GUNNISON TUNNEL ALLOCATION										
		River	Call		Avera	ge Flow	I											Contract	ct Streamflow and Divs Type of Water Diverted into Tunnel Tot 1st fil																
Day of Month	Silver Jack Reservoir & Juniors In Priority (1=Yes, 0=No)	Releases from TP 1st Fill (1=Yes, 0=No)	Released TP Inflow and AU Nat Inflow (cfs)	after AU Nat Inflow and TP Inflow (cfs)	Average Excess TP Inflow and AU Nat Inflow (cfs)	Nat Inflow and TP Inflow (cfs)	TP Res. Content (af)	USGS outflow (cfs)	Compute d Inflow (cfs)	in TP (af)	2nd Fill - Storage - in TP (af)	in TP - Storage - (af)	AU Storag e in TP - (af)	SJ Res Content (af)	Storage (cfs)	BP - Storage in SJ (af	- Storage) in SJ (af	- Conten) (af)	(af)	CR Res Content (af)	Storage (af)	b Computed rel from A CR (cfs) F		#REF!	UGRWC D Contract water (af)	Portal (cfs)	Total Gunnison Tunnel Divs (cfs)	minus TP released inflow (cfs)	GT Divs - TP Released Inflow (cfs)	GT Divs - SJ Storage Inflow by AU Exch (cfs)	D Contract Water Rel (cfs)	Rel from 0 2nd Fill for Rec/Fish (cfs)	1st Fill Credit in BM (cfs)	#REF!	Remain 1st Fill Credits in TP and AU (af)
(1)	(2)	(3)	(5)	(6)	(7)	(8)	(11)	(14)	(15)	(19)	(25)	(30)	(34)	(36)	(39)	(43)	(47)	(49)	(77)	(100)	(124)	(125)	(127)	#REF!	#REF!	(128)	(131)	(132)	(133)	(134)	(135)	(136)	(137)	#REF!	(140)
1 2 3 4 5 6 7 8	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1					70,146 69,874 69,590 69,306 69,022 68,801 68,628 68,501	228 228 228 216 185 159 133	100 93 93 81 82 80 78					5,048 4,885 4,715 4,545 4,370 4,188 4,014 3,837		0 5,044 0 4,883 0 4,715 0 4,545 0 4,370 0 4,186 0 4,014 0 3,833	5 5 0 3 4 7		110,634 110,548 110,462 110,336 110,587 110,673 112,244 112,999	16,729 16,779 16,718 16,639 16,685 16,557 16,557		1,488 1,402 1,382 1,383 1,383 1,383 1,383 1,386 1,409				377 341 340 339 338 337 337 358	1,111 1,061 1,042 1,044 1,045 1,046 1,049 1,051			0 0 0 0 0 0 0	0 0 0 0 0 0 0 0				
9 10	1	1					68,422 68,344	107 100						3,666 3,488	(0 3,66 0 3,48			113,823 114,497			1,460 1,500				409 439	1,051 1,061			0	0				
10 11 12 13 14 15 16	1 1 1 1 1 1	1 1 1 1 1 1					68,157 68,079 68,017	100 100 100 100 0 0	14 69 77					3,306 3,120 2,938		0 3,400 0 3,300 0 3,120 0 2,935	6)		114,497 114,377 115,280 115,280	15,917 15,800		1,500 1,500 1,500 1,502 0 0				439 439 439 441 0 0	1,001 1,061 1,061 1,061 0 0			0 0 0	0 0 0 0 0 0				
17 18 19 20 21	1 1 1 1 1	1 1 1 1 1						0 0 0 0 0 0														0				000000000000000000000000000000000000000	0				0				
22 23 24 25	1 1 1 1 1	1 1 1 1 1						0 0 0 0																		000000000000000000000000000000000000000									
26 27 28 29 30 31	1 1 1 1 1	1 1 1 1						0 0 0 0																		0 0 0 0									
Total Tot (af)	30	30	0	0	0	0		2,112 4,188							(0					0	18,680 37,051	0			4,934 9,787	,	0	0	0	0	0	0	0	
Min	1	1	0	0	0	0	68,017	0	14		0	0	0	2,938	(0 2,93			0 110,336		0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
Max Annual Si	1 ummary (all v (days)	1 values in ac (days)	0 -ft) Note: F (af)	Reservoir c		e end of the			(af)				0 (af)	5,048 (af)	(af)	0 5,044	3 (af)	0 (af)	0 115,280 (af)	16,779 (af)	0 (af)	1,502 (af)	0 (af)	0 (af)	0	(af)	1,111 (af)		0 (af)	0 (af)	0		0 (af)	0 (af)	(af)
Nov	30	30	. /	. /		. ,	58,737	4,470	4,632					1,713	300	0 1,71	3	D C	110,430	15,977		20,025				19,420	604			0		. *			
Dec Jan	31 31	31 31						4,564 4,412	4,521 4,043					1,790 1,880	16) 9)				59 105,687 31 104,652			20,080 19,520				18,851 18,453	1,229 1,067			0					
Feb	28	28					57,749	4,096	3,518					1,870	1(0 1,87) (2	105,444	15,052		17,228				16,989				0					
Mar Apr	31 30	31 30						4,581 5,945	4,135 7,861					1,977 4,629	10 2,65	7 1,97 2 4,62		2		16,820 16,753		32,745 54,717					8,128 31,237			0 0					
May	31	31					74,021	11,966	26,989					13,147	8,80	6 13,14	7	D	110,673	16,481		107,604				48,437	59,167			0					
Jun Jul	30 31	30 31							26,111 11,809					12,428 9,065	12	7 12,42 0 9,06))		16,853 15,418		82,474 92,489					61,663 64,900			0					
Aug Sep	31 30	31 30							8,360					5,202	(0 5,202		D		16,516		97,012 37,051				30,778	66,234 27,265			0					
Oct	31	31	0	0	0	0		0	C						(0						0	0			0	0	0	0	Ŷ		0	0		
Total Min Max	365 28 31	365 28 31	0 0 0	0	0 0 0	0 0 0	57,303	0	101,979 0 26,989	0				1,790 13,147	12,25 (8,80	0 1,79			59 104,652 31 111,643		0	580,945 0 107,604	0 0 0	0 0		0	321,733 0 66,234	0	0 0 0	0		0 0 0	0 0 0	0 0 0	(



Riff raff is slang for a common person. It would be nice to have more places for the riff raff.

-Mark Day, former owner, Almont Anglers

See story on B6

BRIEFS

Times office closed this Friday

The Times office will be closed Friday, Sept. 16 as our staff will be attending the 2022 Colorado Press Association Conference in Denver. We will return to normal hours on Monday, Sept. 19.

CWCB makes 2022 instream flow recommendations

The Colorado Water Conservation Board (CWCB) outlined its 2022 Instream Flow proposals in front of Gunnison County Commissioners on Tuesday, Sep. 13. The board is working on a number of new streams within the county that have been recommended for instream flow water (ISF) rights.

The program, established in 1973, grants CWCB water rights for the protection of the ecosystems within the watershed. Since then, the board has appropriated 1,700 streams covering almost 10,000 miles of stream, most of which are high-basin or perennial streams.

These water rights, administered within the state's priority system, help the state maintain a minimum streamflow in streams or lakes.

The CWCB board presented seven streams in the county for ISF rights. High Country Conservation Advocates proposed two creeks in Union Park: Cross Creek and Cameron Creek.

Colorado Parks and Wildlife proposed a continuation of past projects on Pine Creek and Curecanti Creek, and two new efforts on West Steuben Creek and Steuben Creek. The Bureau of Land Management proposed an expansion of current ISF rights on Van Boxel Creek, which has a terminus at the Little Cimarron River.

Correction

A letter to the editor in last week's edition from Western Colorado University professor Ken Todd included an incorrect email address for Western Music Partners volunteer coordinator Perry Anderson. He may be reached at panderson@western. edu

OBITUARIES

Hugh John Pressler



Hugh Pressler passed away on Sept. 5, 2022 at the age of 90. Hugh was born to Frank and Bridget Pressler and grew up with five siblings on the original Vader homestead on Tomichi Creek and attended Gunnison schools, graduating from Gunnison High School in 1950. Hugh joined the Navy in 1951

and went through boot camp in San Diego, California and was assigned to a Navy destroyer that was based in Norfolk. Virginia. The ship was sent to Korea in January, 1953 to help with the effort there but it turned out to be a trip around the world. They headed for the Pacific Ocean, went through

Honest, Ethical

Professional

(970) 209-4479

CLARKE AGENCY REAL ESTATE

241 N, Main St, Gunnison, CD 81230 Office: (970) 641-0511

w.clarkeagency.ne

the Panama Canal to San Diego to take on supplies for the trip

and left for Korea on January 24. They crossed the International Date Line and on to Sasebo, Japan. The ship joined Task Force 77 for five months off the coast of Korea. In June 1953 they headed home. They crossed the Equator and went through the Suez Canal to get to the Atlantic Ocean and back to Norfolk. The ship stopped at 14 different countries on the way and arrived home on Aug. 22 after traveling 55,362 ocean miles. Hugh later stated that this trip took care of his desire for ocean travel.

After his discharge from the Navy in 1955, Hugh married his high school sweetheart Nancy Rockwell, another Gunnison native, and they made their home in Glendale, California. Nancy taught at a junior high school and Hugh worked at Lockheed-Martin for a couple of years and then became a lab tech at Glendale Power Plant.

Hugh and Nancy, though gainfully employed and settled down in Glendale, began longing for the Colorado mountains and their roots in the Gunnison country. They returned home in 1967 and began their dream of owning and operating their own business. In 1968 they opened the House of Art, a gift and jewelry store on Main Street, This was their chosen profession and they excelled at it and loved every moment of its 25 years of operation. For 10 years of this time Hugh did professional photography, his second love. For many local couples, Hugh both took the wedding photos and made the rings.

In retirement they became involved in the Gunnison Jeep Club and spent a good part of each summer traveling the back country of western Colorado with a group of locals and always returned home with interesting rocks, which, after 'going through the mill" in his basement, became more art and jewelry to be passed on to family and friends. Hugh also developed a strong interest in cooking and became the master chef at the Pressler household. He developed and tweaked volumes of recipes and was still sharing these recipes with friends during his final weeks in the nursing home.

Hugh lost Nancy in 2005 after nearly 50 years of marriage, working and playing together. They never had children of their own. Hugh is survived by his only remaining sibling, Chuck Pressler and 10 nieces and nephews. They include Mike, Marc and Cindy Pressler and Mike, Sandra, Kay, Dick, Dave

and Hugh Leonard and Tom Vader.

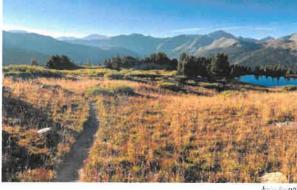
Memorial services for Hugh will be held on Sept. 19 at St. Peter's Catholic Church. A rosary will be held at 9 a.m. followed by Catholic mass at 10 a.m. and then a veteran's graveside at the Gunnison cemetery. In lieu of flowers donations may be made in Hugh's name to the Gunnison Pioneer Museum at 803 E. Tomichi Ave. in Gunnison.

Tom Prather

Prather will be held at 10 a.m. at St. Peter's Catholic church on Sept. 24. A brief graveside service will follow at Gunnison Cemetery and a celebration of life will be held at the Fred Field Center at 1 p.m.

Walter H. Bud McDonald

Walter H. Bud McDonald celebration of life and hog roast. Sept. 24 at 1 p.m. at the Grapp residence at S. Hwy. 149 in Lake City. Beverages and food will be served, please bring a dish to share.



Fall brews along the Continental Divide

The sun rises over the west side of the Continental Divide in the Hunter-Frying Pan Wilderness near Independence Pass. Frost coated the high alpine tundra and the willows are beginning to turn gold, signifying the arrival of the fall season.



NEW LISTING Immaculate 3 bdrm/2 bath. ranch style home with attached 2 car garage, shed and large fenced yard on a corner lot! Oulet neighborhood near Hartman Rocks, 41 Willow Trail: \$525,000,

FABULOUS VIEWS from this 1 acre river front property on the Ohio Creek. Property has electric to the lot line with central sever available. Water is serviced by a shared well. 205 Spring Meadows Trail: \$385.000

A BASE OPPORTUNITY to have property in Duton Guter port with of Ohio City. This property has 2 possible out a set on the mining claim. The lower site is heaving the time toper site has been been used evaluations that and the times riews to the west overlooking the vall TBD Dutch Gulch: \$30,000 "om.

NEW LISTING floor & upstairs of this 2.304 square foot, 4 bdrm/2 bath, two story home on 6.8 acres overlooking the Ohio Creek Valley & Horse River Ranches. Partially fenced with loafing shed for your horses. Unobstructed views of Carbon Peak & the Anthracites to the north, 174 Tiama Trail: \$1,400,000.

3 HOMES TOTAL Investment opportunity in town where each home is 2 bdrm/1 bath, lenants pay utilities. \$5,400 income per month. Location near the airport and fairgrounds. 314 S. 12th St; \$1,200,000.

PRICE REDUCED Big valley views from this 4 bdrm3 bath, 2,7883t home on 4,7 acres with loafing shed & corral. Lovely open kitchen, office off the mudroom, main floor master suite. Downstars features 3 bedrooms, bath, iwng orn, wood slove & bonus space for a home gym or game roam. 262 Sage Drive; \$859,000.

MOUNTAIN GETAWAY Home on 5 mining claims in Ohio City features an excellent mixture of wildlife, nearby trails, aspen. pines & 300 leet of Gold Creek frontage. 3 bdrm/2 bath house, huge attached garage, large detached barn, touched by Forest Service lands. Gold and Silver mine. 5498 County Road 771: \$1,750,000,

💼 R MLS People's Choice Award for Best Reallor 2021 👔 View listings at: www.clarkeagency.net 📗 🔄 🐔 🏭



kitchen, plenty of storage

for your loys. Zoned R-3

on 6 city lots, 502 S, 11th:

\$630,000.

NEW LISTING Over 1,900 square foot log calur on 35 scrass features 2 beercoms, an open living room 8 kitchen with custom made oak adritional beds for guests & the woodslove keeps the cabn warm. Well in place 8 solar panets for electroity. Seasonal pond and sold partially urnished. Lot 1 Stratman Subdivision. \$425,000.

DON'T MISS THIS Fanlastic 3 bedroom/2 bath home with woodstove. large open kitchen, laundry room & work shed in Pitkin. Built in 2012, great condition, tile entryway, tucked away in the trees. 832 River Street: \$479,000.

Highway 50, \$635,00

GREAT IN-TOWN HOME 3 bdrm/2 bath. 1,824sf home with main floor office or guest area. Custom owner designed with Douglas fir handrail. window & baseboard trim, maple kitchen cabinets, large southern windows for passive solar & stained concrete floors downstairs, 210 S, Boulevard; \$695,000

The funeral service for Tom



Gunnison Country Times

Yard of the Week

This Yard of the Week was reprinted by request. It was missing the address in the Sept. 1 editior

The Top O' the World Garden Club awarded Rhonda and Jeff Elmore and Mady and Bodie the boxers of 425 W. Spencer with Yard of the Week. "When we decided to redesign our front yard several years ago we had several goals in mind," the pair wrote. Their goals included:

- · Getting rid of the grass in the front yard
- Xeriscaping as much as possible using local materials · Saving our beautiful trees and designing around them
- · Planting native flowers and supplementing with different plants and colors
- Having natural looking walkways and sitting areas
- Incorporating the irrigation ditch into a water feature
 Having an esthetically pleasing look of the yard that fits into
- and complements the neighborhood

"We think we were able to meet all our goals and are now enjoying taking care of it," they said. *

We kept a small patch of grass in our backyard for our boxer dogs to enjoy, but we have also been busy designing different areas back there with an abdunance of color and textures. This includes two planter beds with summer vegetables and flowers throughout the spring and summer seasons

If you see us out there, make sure you wave as you go by!"



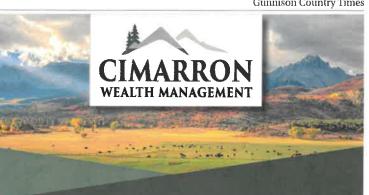
ourt .

Volunteers restore critical habitat

High Country Conservation Advocates (HCCA) held a stewardship weekend over Labor Day. Over the course of three days, 61 volunteers restored critical wildlife habitat and improved watershed health at Black Sage Pass in Waunita Park and at the Miller Ranch State Wildlife Area in the Ohio Creek Valley. HCCA partnered with the U.S. Forest Service, Colorado Parks & Wildlife, the Upper Gunnison River Water Conservancy District, and Wildlands Restoration for the project. The volunteers were fueled by donated Firebrand Deli sandwiches for lunch and rewarded with a kolsch from Zuni Street Brewing at the end of the day. Two more opportunities to volunteer are quickly approaching. The first is scheduled for Sept. 23 and 24 with the Bureau of Land Management. Visit hccacb.org for more information.







Colorado West Investments is now CIMARRON WEALTH MANAGEMENT

SAME LOCATION, SAME TEAM, **GREATER PURPOSE**

For 30 years our firm has been called Colorado West Investments. The beart of our operation is still in Western Colorado and investments are still a key part of the work we do. But in recent years our team has grown, our client community has spread and our work has evolved beyond investments

We'd love to tell you more. Stop by to see us or visit us online at www.wealthwithapurpose.com



1115 N. Main St. Suite A Gunnison, CO Ph: 970.641.0400

1731 E. Niagara Rd. Montrose, CO Ph: 970.249.9882

untret offered through LPI. Financial, Member FINRA/SIPC. Insemnent advice offered through Cumarion Wealth Management, Inc. a registered investment advisor. Conserver Wealth Management, inc. is a separate entity firm LPL Firme ial.



844 CAMINO DEL RIO One of the most beautiful settings long the Gunnison Rivert This 3 beau h nome is situated on acres, \$1,575,000





Jay Miller







320 W LEROY AVE

ireat in town location, 4 bed / 3 bath home with partial unfinished base-

ng. \$775,000

large comer lot with



Havefall Johnson

140 1/2 S. 7TH

Opportunity to own a 3 bed 2 bath alley Condo with 1.355 square feet

ace, garage ba area, **\$469,0**01

Gunnison Basin snow forecast uncertain

Bella Biondini

met Atlanam Editor

As many people in the Gumison Valley begin to anticipate the arrival of the upcoming ski season, meteorologists are predicting a "triple-dip" La Niña, an anomaly that could bring above-normal snowfall to the Gumison Country.

On Aug. 31, the World Meteorological Organization (WMO), the United Nation's weather agency, announced the likely continuation of the current La Niña weather trend through the end of the year. La Niña, part of the El Niño-Southern Oscillation climate cycle, is a cooling of the Pacific Ocean's surface temperatures that affects weather patterns in the U.S., as well as around the globe. If La Niña persists for a third consecutive winter, the event will mark the century's first triple dip, and only the third occurrence recorded since 1950.

WMO models show La Niña persisting over the next six months, with a 70% chance until November. The probability gradually decreases to 55% into December and February, while the probability of an entering neutral cycle is about 30%. The likelihood of an El Niño event developing is near zero.

Gunnison falls onto a fluid boundary between two forecast zones, making weather pattern predictions difficult. It is much easier to forecast weather trends immediately to the north and south of the valley.

With the likely arrival of another La Niña cycle, the San Juan Mountains and the

00

PRINCESS

Four Corners region have a higher probability of belownormal precipitation during the upcoming winter season, said Aldis Strautins, a National Weather Service hydrologist based in Grand Junction.

The northern and north-central mountains of Colorado have a higher probability of more snowfall. "And where does Gunnison

sit?" Strautins asked. "Kind of in between those two, so it's harder to correlate and forecast."

Within the past few weeks, meteorologists have also indicated the already strong presence of a La Niña during the summer months — "which is actually really rare," said Sam Collentine, chief operating officer for the skier-oriented OpenSnow weather forecasting service.

"When we look back historically, that's typically good news for snowfall across Colorado, the Western Slope and really the entire Western U.S," Collentine said. Looking back at OpenSnow's

data, the last time a La Niña developed in August was 2010. The following winter brought anywhere from 10-40% aboveaverage precipitation to the Western Slope and Colorado, Collentine said. The Gothic site measured about 20% above average, while Crested Butte Mountain Resort fell at about 14%.

Despite potentially positive predictions, warming temperatures are the outlier "throwing a wrench" into the seasonal outlooks, especially when it comes to snowfall, he said. Rising temperatures over the next few decades will likely bring more rain events instead of snow.

(Bella Biondini can be contacted at 970.641.1414 or bella@ gunnisontimes.com.)

666

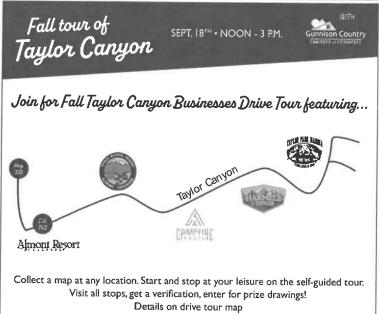


INDEPENDENC

. Hatthew 6: 27

To learn more about one: two, three, four or all five of us, please call our foster mom, Shanda at (978)901-3828.





CHAMBER News You Can Use

Autumn — also called fall — the season of the year between summer and winter, astronomically from the September equinox to the December solstice.

As we have just celebrated LABOR DAY, the chamber would like to recognize and celebrate the roll up your sleeves work we get accomplished here in Gunnison County. We have an amazing Gunnison County, from edge to edge. Shout out to all of us as we wind down this summer season and turn toward fall.

The Gunnison Chamber has some awesome ways to participate in fall and we hope you all join in.

September 16 - Annual Chamber Scratch & Scramble – 2nd Commemorative Tom Morrow Golf Tournament sponsored by High Mountain Liquor & Kooler Garage Doors hosted at the Dos Rios Golf Club. Need a registration form, contact the Gunnison Chamber at 970 641 1501 to sign up a team or sponsor a course sign.

September 18 - New this fall, follow the Fall Tour of Taylor Canyon Businesses. Complete the tour to be eligible to win some fabulous prizes. Join in and learn about the business community of Taylor Canyon.

October 2 - Watch for information out soon on the Gunnison Chamber Annual Celebration of Business & Employees scheduled for Sunday, October 2 hosted at the I Bar Ranch 11:30 am to 3 pm. Bring your employees and help share in celebrating all things business as the culmination of the summer season. Tickets will be available through the Gunnison Chamber. One does not need to be a chamber member to join this event! We encourage all businesses to share in this festive occasion, bring your employees, as a way to share a thank you for summer. Network with other businesses and community members and congratulate all on a great summer season.

October 7 – Join in the Western Homecoming events as the Mural Committee celebrates the completion of the IOOF Park Mural with Western Alumni artist Amie Jacobsen and her co-artist, Will, after the Western Homecoming Parade. Be sure to also check out the newly completed Be Kind mural on the Abracadabra (211 North Main Street) wall, behind the Bank of the West building, completed by Western Alumni artist Jennifer Vannatta and co-artist Ever Morrow.

October 31 ~ Gunnison Business District Trick or Treat with the closure of Main Street and many happy goblins and ghouls from 3:30 to 5:30 pm

October & November Community Business After Hours - TBD

November 26 – Annual Sale of Gunnison Holiday Greenbacks, sold through the Community Banks of Colorado drive thru. Details out in November.

December 2 – Gunnison Annual Night of Lights – 5:30 to 7:30 pm Main Street – Santa Lights the Tree at 6:30 pm!

I am sure there will be more fall events to add in as the calendar continues. Explore our county – plan a staycation at our local rv/campgrounds/lodging options, enjoy our neighborhood to the fullest.

Cheers to all things local! Celeste – Gunnison Country Chamber of Commerce

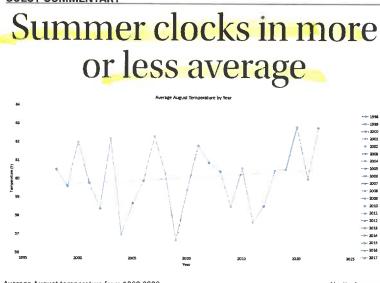


THIS WEEK AT THE PIONEER MUSEUM

The Legacy of

C. J. Miller

GUEST COMMENTARY



Average August temperature from 1992-2022.



Bruce 'Barometer' Bartleson Special to the Times

Surprise! I suppose you think the weather this summer (June, July and August) was hotter than usual. Well, not really - or not exactly.

The average daily high temperature (78.5 degrees) for the whole summer was actually normal for this time of year. The highest temperature all summer was 87 degrees, recorded in June, which is nothing special, and most high temperatures were close to average. For example, the average high

for July was 80 degrees and only 78.3 degrees for August. Compare that to other towns in Colorado. High temperatures in Grand Junction in July averaged 95.5 degrees. We escaped!

On the other hand, in Gunnison, the average tem-perature of the entire sum-. mer was 62.7 degrees, which is almost 4 degrees higher than normal. What's going on is that the overnight temperatures (Tmin) were much warmer than average. Indeed, Tmin was 5.6 degrees warmer than the long term average. Tmin for August, 2022 (47.2 degrees) set a record that goes back to the 1890s. When considering how hot it is, one usually talks about the high temperatures, not the low temperatures, and, as I said, it wasn't exactly hotter than usual.

Precipitation was a pleasant surprise due to a good monsoon. Although we are still Alantha Garrison

a little behind reaching our

average of around 10.5 inches, we didn't fare too badly. Rain

amounted to 1 inch in June, 2.07

inches in July and 1.27 inches

in August which is actually 0.7

inches above long term aver-

age for the entire summer.

Not to be gloomy, but we were

about in the same position last

September, and then we ran

into a dry spell for the rest of

the year and ended up 2 inches

short for the year. Crested Butte

is in the same position, if not

a little worse, as far as mois-

ture up to date. Most of western

Colorado is in worse shape con-

(Bruce Bartleson is a

Western Colorado University

Emeritus Professor of Geology.

Since his retirement he spends

much of his time watching the

cerning moisture.

local weather,)

Submitted by Larry McDonald

The Pioneer Museum board of directors and volunteers are mourning the recent passing of our Past President and Curator, Charles Julian (C. J.) Miller, this past week, and will host "C. J. Day at the Museum" this coming Sunday, September 11, to pay tribute to his legacy. The event is free to all attendees, and will be held from 9:30 a.m.-4:00 p.m., with music provided by board member Ron Kibler and friends. Light refreshments will also be served.

I first met C. J. when I applied to volunteer at the museum back in the summer of 2018, and it wasn't long before I realized that he was "one of a kind". After my first season greeting customers and taking admission fees at the front entrance, C. J. asked me if I'd be interested in writing the weekly museum articles. As soon as I agreed to do so, we immediately hopped in a car and drove down to the Gunnison Times office, and he introduced me to Editor Chris Dickey and worked out the details. If you knew C. J., he was not one to let things lie for long, he was a "get it done now kind of guy.

C. J. then soon asked me if I'd be interested in being one of the museum "openers", and after I said I would love to, he took me around the campus showing me the proper procedures for doing so. And once I began my weekly task of opening over three dozen

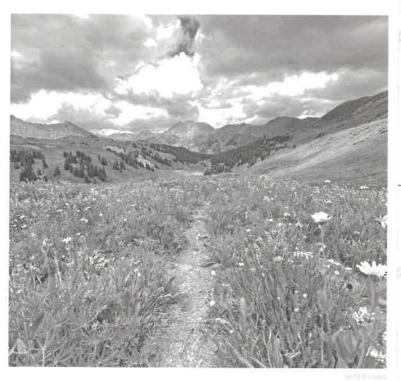
THROUGH SEPTEMBER

MUSEUM OPEN DAILY FROM 9 A.M.- 5 P.M.

buildings and structures, and insuring lights and sound systems were operating properly, I always appreciated C. J.'s innate ability to know if you missed something along the way. Believe me, with so many collections and exhibits on our extensive campus, it is easy to miss turning on a light switch in a display case or forgetting to put a flag up outside the D.A.R. building. Somehow, C. J. would know and point it out to you in his own special engaging and teasing manner.

Those of you who knew C J., know he was dedicated to preserving our local history, and he put his heart and soul into it. It was just last summer when a museum visitor reported the tin roofing material on the Mergelman Cabin was about to blow off during a blustery day. Once I tracked C. J. down (never an easy task, as he was always on the move!), we grabbed a ladder and some tools and headed to the cabin. And even though 1 offered to climb up and do the repairs myself, of course C. J. insisted on ing them himself. That was who C. J. was. He was a doer. And he got things done!

This summer season has certainly been more somber than the previous ones I've experienced, without C. J. being at the museum nearly every day as he was in the past, always willing to share his vast knowledge with others. I know there are so many of us who already miss him dearly and we hope you are able to join us this Sunday to remember C. J. and his lasting legacy in our community.





ADMISSION \$10 AGES 13+, \$3 FOR AGES 6-12, FREE FOR 5 AND UNDER

LOCATION: 803 E. TOMICHI AVE., **GUNNISON** (970) 641-4530

www.GunnisonPioneerMuseum.com

September 16, 2022



HARVEST HAUL: Heather Swenson picks up fresh fruit and veggies at the Mountain Roots Food Project CSA pickup at Big Mine Ice Arena last week. PHOTO BY ROBBY LLOYD

Stewardship is important and ongoing

Dear Community,

It's been a busy stewardship season at High Country Conservation Advocates, and we would like to share the story of our most recent project restoring wet meadows in the sagebrush steppe ecosystem. Whether you joined us in person, in spirit or through contributions your support helped us immensely.

Our Labor Day Stewardship Weekend was a huge success thanks to the hard work and volunteerism of this community. In partnership with the U.S. Forest Service, Colorado Parks & Wildlife, Upper Gunnison River Water Conservancy District and Wildlands Restoration Volunteers, 61 volunteers spent three days restoring five acres of critical wildlife habitat and improving watershed health at Black Sage Pass in Waunita Park and Miller Ranch State Wildlife Area in the Ohio Creek Valley.

In addition to the hard work of our volun-

teers, we are grateful for support from Firebrand Deli and Jermaine's for making delicious lunches, and for Zuni Street Brewing, providing the much-deserved Kolsch at the end of each day.

If you haven't joined us yet, we have two more opportunities this season to restore critical wet meadow habitat. Improving these habitats supports healthy wildlife populations, (including the Gunnison Sage-Grouse!) people and livelihoods in our community. Our next stewardship project will celebrate National Public Lands Day, where we will join the Bureau of Land Management on September 23 and 24. Visit hccacb.org for more information.

Many thanks, and we'll see you again soon!

Eli Smith Stewardship Program Director High Country Conservation Advocates

Crested Butte News

STOR receives Starburst Award for use of lottery funds

NEWS

Sustainability improvements include designated camping, Shady Island

[BY KATHERINE NETTLES]

The Gunnison County Sustainable Tourism and Outdoor Recreation Program was awarded a Starburst Award this month in recognition of its work in the past three years to make sustainability improvements across the Gunnison Valley. The award recognizes excellence in the use of lottery funds already deployed, specifically two Great Outdoors Colorado (GOCO) grants the county was awarded in 2019 and 2020 totaling \$810,000.

There were eight total 2022 Starburst Award winners, chosen based on the creativity of the project, economic and social impact on the community, and whether the project achieved its goal.

The two grants referenced by the award, a \$350,000 GOCO Stewardship Impact grant the county received in 2019 and a \$450,000 GOCO Resilient Communities grant received in 2020 originated as lottery proceeds which are distributed statewide. The funds were used in Gunnison County "to support the work of the STOR Committee including capacity building, staffing, stewardship work with Crested Butte Conservation Corps, Gunnison Trails, Crested Butte Land Trust, and CB Avalanche Center," explained Cathie Pagano, Gunnison County assistant county manager for community and economic development.

The award recognized the STOR Committee for its work in a Colorado Lottery press release this summer: "Negative environmental impacts affecting the Gunnison community from increased visitation to public lands, evolving recreation styles, human and wildlife interaction, and climate change drove the county's decision to make sustainability improvements. Approached collaboratively, the community created the STOR program, which brings together stakeholders to better navigate a variety of land use issues."

Joe Lavorini, Gunnison County stewardship coordinator and Southwest Colorado program manager for the National Forest Foundation, detailed the STOR committee's work. "With those funds, we were able to implement the designated camping project around Crested Butte, construct the Shady Island River Park in Gunnison, build a toilet at Tent City, create Leave No Trace messaging throughout the valley, and employ the STOR Corps conservation



The STOR committee celebrated its award on August 25 while participating in a volunteer day at a wetlands restoration project near Gunnison. COURTESY PHOTO

corps, among other accomplishments," he said.

The Starburst Award was presented to STOR at the conclusion of a volunteer event at Trail Creek near Gunnison on Thursday, August 25. The STOR Corps and STOR Committee are working on the Trail Creek Wetland Restoration Project to restore degraded wetlands and mimicking the role of beavers in the ecosystem.

Other winners and lottery

funds used were City of Loveland (\$850,000), City of Greeley (\$719,515), Carbon Valley Parks and Recreation District (\$221,901), Larimer County Dept. of Natural Resources (\$500,000), Aspen Valley Land Trust (\$2.5 million), Cheyenne Mountain State Park (\$302,500) and City of Lamar (\$502,910). Submissions included programs and projects such as parks, playgrounds, outdoor recreation facilities, land conservation, trail enhancement, open space acquisition, wildlife natural resource preservation, and public school capital improvements, according to the Lottery.

September 9, 2022

1 15

The statewide grant distribution of lottery funds is done through grants via GOCO, the Conservation Trust Fund (CTF), Colorado Parks and Wildlife (CPW), which manages the Outdoor Equity Fund, and Building Excellent Schools Today (BEST).

Drought conditions, local trails benefitting from rainfall

Autumn weather will determine final conditions prior to winter

[BY KATHERINE NETTLES]

It might seem hard to believe with the consistent rain showers occurring over the past couple months, but Colorado's persistent drought conditions cannot be cured with one robust monsoon season. The good news is that this particular monsoon season has improved conditions significantly across the state and Gunnison County, and the 30-day forecast appears positive for continuing that trend and potentially removing drought classifications in a small portion of the Gunnison Valley. It has also been good for trail maintenance in the valley.

"Yes, the rain has improved conditions in the Upper Gunnison Basin, but we are still classified as being in drought," said Beverly Richards, water resource specialist with the Upper Gunnison River Water Conservancy District (UGRWCD).

The Upper Gunnison Basin has been in drought since September 17, 2019. According to the National Oceanic and Atmospheric Administration (NOAA) and National Integrated Drought Information System (NIDIS), 100% of Gunnison County is still classified as abnormally dry (D0) and 96.49% is classified as in moderate drought (D1); however, 8.94% is classified as in severe drought (D2) and no part is classified as being in extreme drought (D3).

CONTINUED ON PAGE 21

Back to school comes mask-free and with fewer students

More kitchen staff, RTA adding overflow van

[BY KENDRA WALKER]

A new school year is back in full swing as Crested Butte Community School students returned to classrooms last week, and as Gunnison Watershed School District superintendent Dr. Leslie Nichols put it, "the positivity was palpable."

"Everyone was so excited to get back to school and to get back to school without masks," Nichols said. "We are getting to this place in the pandemic where we feel like it's not a constant focus of every single day. We can better focus on learning and building community in our classrooms and just being able to more fully engage with our work of learning and teaching."

Food service is back at the CBCS kitchen this year, after last year's hiatus, with Kim Kula returning as kitchen manager. Nichols said that there are also two full-time staff and four part-time staff, but noted that the school needs six full-time equivalent people to have a fully staffed kitchen. "My understanding is that it is going quite well," she said. "Having Kim back is fantastic. She has such a passion for that position and is so skilled. The Crested Butte PTA have come with volunteers and support to be sure we can keep things functional, and they have been amazing."

Nichols noted that the district also recently launched an internship program that would allow high school students to help in the school kitchens, which could potentially alleviate CBCS' food needs in the future.

In the realm of buses, Crested Butte still does not have any bus drivers. "It is disappointing that we opened the year without any drivers," said Nichols. "That said, we do have some interest in some potential drivers for the Crested Butte routes." To become a bus driver requires having a Commercial Driver's License (CDL) and specific training for driving a school bus. "When we have applicants it takes some weeks to complete that training, but I'm optimistic that soon we will have some bus service in Crested Butte," she said.

Nichols noted that the school continues to partner with RTA with an extra bus on its regular route from CB South in the mornings. The RTA has also added a van on that same route to carry overflow and extend student capacity.

CONTINUED ON PAGE 22



Crested Butte News - Sept. 2, 2022

with

resp

to b base requ copy last 1 vacy had clude

to yo

may

ment

last 1

an ag

to th

liver

cause

ume

equit

and (

coun

from

from

relief

"Sure

agree

most

home

are le

es. W

USPS

to cha

a nati



stion Friday, September 9 5 - 7 pm state the history, aesthetic + artistry of the west, art in an array of mediums.

Crested Butte News

Drought

CONTINUED FROM PAGE 1

Those conditions, last updated on August 23, are an improvement from the previous percentages reported on July 5, when 60% of Gunnison County was classified as in severe drought (D2). Most of that D2 area was downgraded to moderate drought over the past 30 days.

Shea Early, Crested Butte Public Works director, reports that 6.58 inches of rain fell in CB this summer, with 1.77 inches in June, 2.43 inches in July and 2.38 inches in August. billy barr, who tracks precipitation in Gothic year-round, reports that Gothic has received 6.22 inches of rain this summer compared with a 22-year average of 6.12 inches. "So basically in Gothic it was an average rain summer," he summarized.

Richards received word from the National Weather Service as of August 24 that the Upper Gunnison Basin is now at 100% of average precipitation for the year to date, which is up from slightly below normal at the previous update earlier in August.

NOAA/NIDIS classified July in Gunnison County as the 41st wettest July on record over the past 128 years, with .35 inches more than what is considered normal.

Tacky trails

Recreationally, Crested Butte Mountain Bike Association (CBM-BA) director Dave Ochs says the local trails are in good shape and soaking up the rainfall well," he said, describing conditions as "super tacky - really fun riding!"

Ochs explained some added benefits to the heavy daytime rains that have made an appearance. "It's been good to see some of the downpours during the day. Trail crews get to see how water moves after each of those bigger/heavier downpours, and we can maintain accordingly. CBCC crews have been making 'drains' a priority this year, and you can see it with minimal puddling and dry trails.

"Of course, can't get to 'em all and there's some mud and puddling out there. Overall, it's been great for the conditions all around, awesome that we're not breathing smoke this summer, and hopefully adding some groundwater to the local supplies," concluded Ochs.

Long-range outlook

Richards said forecasters are not yet providing a percentage of the county where the drought designation removal is likely to happen, but confirmed, "All but approxi-

NEWS

mately 9% of the county moved from severe to moderate. The area that is in abnormally dry conditions is located in the eastern edge of the county and the severe area is located on the western side."

NOAA is predicting a 68% chance that the area might move from La Nina to Neutral next Spring, reported Richards. "This is good for us as La Nina historically means warmer temperatures and below normal precipitation in southern areas of the state. The Colorado River Basin Forecast center said the precipitation that we did receive improved base flows and soil moisture conditions, but August-October weather will determine final conditions prior to win-

ter," she said, based on information provided at the Aspinall Operation meeting held on August 24.

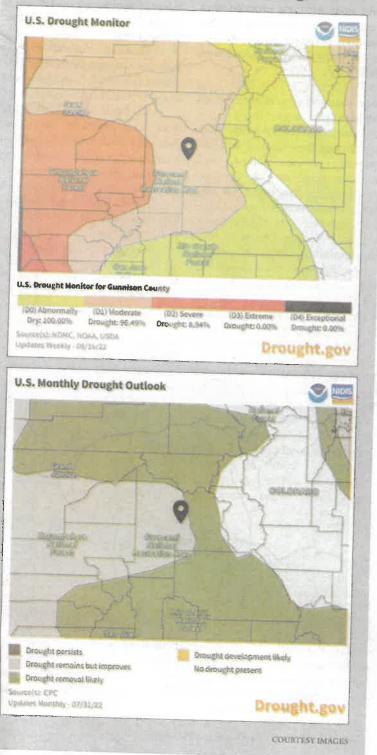
le at crestedbuttearts.org

The long-range forecast, which combines several drought monitoring "products" and indices and six-month, one-year, two-year and five-year predictions, indicates that Gunnison County will range mostly in the D0 to D1 categories in the longer term with geographical variations ranging from wet conditions in the 70 to 80 percentiles (W) to severe and exceptional drought of D3 and D4.

The NOAA/NIDIS drought monitor website describes DO conditions as: "Hay production decreases; rangeland is dry. Irrigation begins sooner;" D1 conditions are

A RARE VACATION RI EXPERIENCE Now Booking for Summer 2023

Long term drought forecast maps from the NOAA/NIDIS Drought Monitor page



shopping, the Center for the Arts and public trans complete concierge service for a truly unique vaca

and a second second





970.349.5780 | ACADEMYPLAC



Underwritten By

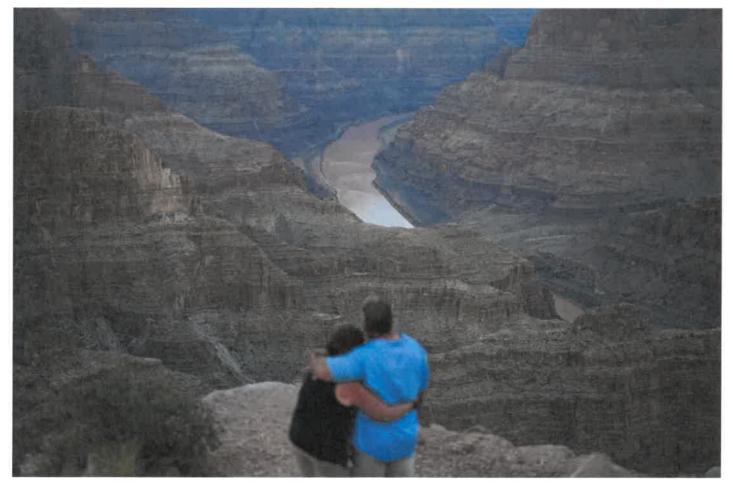
WATER

100 years after the Colorado River Compact, the Southwest is nearing a crisis point

Pressure has intensified on the river as the driest 22-year stretch in the past 1,200 years has gripped the Southwest



Chris Outcalt and Brittany Peterson, AP 4:20 AM MDT on Sep 12, 2022



Alyssa Chubbuck. left, and Dan Bennett embrace while watching the sunset at Guano Point overlooking the Colorado River on the Hualapai reservation Monday, Aug. 15, 2022, in northwestern Arizona. (John Locher, AP Photo)



Southwest near crisis 100 years after the Colorado River Compact he intensifying crisis facing the Colorado River amounts to what is fundamentally a math problem.

The 40 million people who depend on the river to fill up a glass of water at the dinner table or wash their clothes or grow food across millions of acres use significantly more each year than actually flows through the banks of the Colorado.

In fact, first sliced up 100 years ago in a document known as the Colorado River Compact, the calculation of who gets what amount of that water may never have been balanced.

"The framers of the compact — and water leaders since then — have always either known or had access to the information that the allocations they were making were more than what the river could supply," said Anne Castle, a senior fellow at the Getches-Wilkinson Center at the University of Colorado Law School.



Commerce Secretary Herbert Hoover presides over the signing of the Colorado River Compact in Santa Fe, N.M., on Nov. 24, 1922. Seven land-owning white men brokered a deal to allocate water from the Colorado River, which winds through the West and ends in Mexico. (U.S. Bureau of Reclamation via AP)

During the past two decades, the situation on the Colorado River has become significantly more unbalanced, more dire.

A drought scientists now believe is the driest 22-year stretch in the past 1,200 years has gripped the southwestern U.S., zapping flows in the river. What's more, people continue to move to this part of the country. Arizona, Utah and Nevada all rank among the top 10 fastest growing states, according to U.S. Census data.

While Wyoming and New Mexico aren't growing as quickly, residents watch as two key reservoirs — popular recreation destinations — are drawn down to prop up Lake Powell.

Colorado River Compact: 100 years later

EDITOR'S NOTE: This is part of a collaborative series on the Colorado River

Southwest near crisis 100 years after the Colorado River Compact

Meanwhile, southern California's Imperial Irrigation District uses more water than Arizona and Nevada combined, but stresses their essential role providing cattle feed and winter produce to the nation.

Until recently, water managers and politicians whose constituents rely on the river have avoided the most difficult questions about how to rebalance a system in which demand far outpaces supply. Instead, water managers have drained the country's two largest reservoirs, Lake Mead and Lake Powell, faster than Mother Nature refills them.

In 2000, both reservoirs were about 95% full. Today, Mead and Powell are each about 27% full once-healthy savings accounts now dangerously low. as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Tribune, The Arizona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- · Southwest: Nearing a crisis point
- Colorado: <u>Farming, water and Wall</u> <u>Street</u>
- Mexico: <u>Uncertainty in the dry north</u>
- California: <u>Stressed river keeps</u> <u>desert farms alive</u>
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>
- New Mexico: Make do with less
- Nevada: Looking to conservation
- Tribal nations: <u>State of unease</u>
- Video: <u>Colorado Basin tribes without</u> <u>water rights</u>
- Video: <u>What the Colorado River</u> <u>Compact got wrong</u>

Upcoming stories:

- Utah: Coming Friday
- Wyoming: Coming Friday

The reservoirs are now so low that this summer Bureau of Reclamation Commissioner Camille Touton testified before the U.S. Senate Energy and Natural Resources Committee that between 2 million and 4 million acrefeet would need to be cut next year to prevent the system from reaching "critically low water levels," threatening reservoir infrastructure and hydropower production.

The commissioner set an August deadline for the basin states to come up with options for potential water cuts. The Upper Basin states — Colorado, Utah, New Mexico and Wyoming — submitted a plan. The Lower Basin states — California, Arizona and Nevada — did not submit a combined plan.

The bureau threatened unilateral action in lieu of a basin-wide plan. When the 60-day deadline arrived, however, it did not announce any new water cuts. Instead, the bureau announced that predetermined water cuts for Arizona, Nevada and Mexico had kicked in and gave the states more time to come up with a basin-wide agreement.

Still left out



A formerly sunken boat sits upright into the air with its stern stuck in the mud along the shoreline of Lake Mead at the Lake Mead National Recreation Area, June 10, 2022, near Boulder City, Nev. (AP Photo/John Locher, File)

A week before Touton's deadline, the representatives of 14 Native American tribes with water rights on the river sent the Bureau of Reclamation a letter expressing concern about being left out of the negotiating process.

"What is being discussed behind closed doors among the United States and the Basin States will likely have a direct impact on Basin Tribes' water rights and other resources and we expect and demand that you protect our interests," tribal representatives wrote.

Being left out of Colorado River talks is not a new problem for the tribes in the Colorado River Basin.

The initial compact was negotiated and signed on Nov. 24, 1922, by seven land-owning white men, who brokered the deal to benefit people who looked like them, said Jennifer Pitt of the National Audubon Society, who is working to restore rivers throughout the basin.

"They divided the water among themselves and their constituents without recognizing water needs for Mexico, the water needs of Native American tribes who were living in their midst and without recognizing the needs of the environment," Pitt said. Southwest near crisis 100 years after the Colorado River Compact



Mexico, through which the tail of the Colorado meanders before trickling into the Pacific Ocean, secured its supply through a treaty in 1944. The treaty granted 1.5 million acre-feet on top of the original 15 million acrefeet that had already been divided, 7.5 million each for the Upper and Lower Basins.

Tribes, however, still don't have full access to the Colorado River. Although the compact briefly noted that tribal rights predate all others, it lacked specificity, forcing individual tribes to negotiate settlements or file lawsuits to quantify those rights, many of which are still unresolved. It's important to recognize the relationship between Native and non-Native people at that time, said Daryl Vigil, water administrator for the Jicarilla Apache Nation in New Mexico.

"In 1922, my tribe was subsistence living," Vigil said. "The only way we could survive was through government rations on a piece of land that wasn't our traditional homeland. That's where we were at when the foundational law of the river was created."

Competing interests



Southwest near crisis 100 years after the Colorado River Compact

Joe Bernal works on his family's farm on Thursday. Sept. 1, 2022. in Fruita, Colo. In November 1922, seven landowning white men brokered a deal to allocate water from the Colorado River, which winds through the West and ends in Mexico. During the past two decades. pressure has intensified on the river as the driest 22-year stretch in the past 1,200 years has gripped the southwestern U.S. (Hugh Carey, The Colorado Sun)

Agriculture uses the majority of the water on the river, around 70% or 80% depending on what organization is making the estimate. When it comes to the difficult question of how to reduce water use, farmers and ranchers are often looked to first.

Some pilot programs have focused on paying farmers to use less water, but unanswered questions remain about how to transfer the savings to Lake Powell for storage or how to create a program in a way that would not negatively impact a farmer's water rights.

Antiquated state laws mean the amount of water that a water right gives someone access to can be decreased if not fully used.

That's why the Camblin family ranch in Craig in northwest Colorado plans to flood irrigate once a decade, despite recently upgrading to an expensive, water-conserving pivot irrigation system.

Nine years out of 10, they'll receive payment from a conservation group in exchange for leaving the surplus water in the river. But in Colorado, the state revokes water rights after 10 years if they aren't used.

Not only would losing that right mean they can't access a backup water supply should their pivot system fail, but their property's value would plummet, Mike Camblin explained. He runs a yearling cattle operation with his wife and daughter, and says an acre of land without water sells for \$1,000, about a fifth of what it would sell for with a water right attached.

There are other ways to improve efficiency, but money is still often a barrier.

Wastewater recycling is growing across the region, albeit slowly, as it requires massive infrastructure overhauls. San Diego built a robust desalination plant to turn seawater to drinking water, and yet some agricultural users are trying to get out of their contract since the water is so expensive. Some cities are integrating natural wastewater filtration into their landscaping before the water flows back to the river. It's all feasible, but is costly, and those costs often get passed directly to water users.

One of the biggest opportunities for water conservation is changing the way our landscapes look, said Lindsay Rogers, a water policy analyst at Western Resource Advocates, a nonprofit dedicated to protecting water and land in the West.

Converting a significant amount of outdoor landscaping to more droughttolerant plants would require a combination of policies and incentives, Rogers explained. "Those are going to be really critical to closing our supply-demand gap."

After years of incentive programs for residents, Las Vegas recently outlawed all nonfunctional grass by 2026, setting a blueprint for other Southwest near crisis 100 years after the Colorado River Compact Western communities. For years, the city has also paid residents to rip out their lawns.

In Denver, Denver Water supplies about 25% of the state's population and uses about 2% of the water. The city has had mandatory restrictions in place for years, limiting home irrigation to three days per week.

This summer, in southern California, the Metropolitan Water District instituted an unprecedented one-day-a-week water restriction.

Still, regardless of the type of water use, more concessions must be made.

"The law of the river is not suited to what the river has become and what we see it increasingly becoming," Audubon's Pitt said. "It was built on the expectation of a larger water supply than we have."

Watch: What the Colorado River Compact got wrong

© 2022 The Colorado Sun. Proudly powered by Newspack by Automattic



Underwritten By

WATER

Farming, water and Wall Street on Colorado's Western Slope

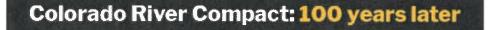
Agriculture producers in Colorado's Grand Valley face difficult questions over the future of Colorado River water in the West



Chris Outcalt 4:25 AM MDT on Sep 14, 2022



Joe Bernal works on his family's farm on Sept. 1 in Fruita, Colo. (Hugh Carey, The Colorado Sun)



Colorado farmers face difficult questions over future of river water LOMA – Just as Joe Bernal starts to back a shiny-green John Deere tractor out of a massive garage on his family farm a few miles north of downtown Fruita, his son Bryan appears in his line of sight and starts waving his hands around, pointing at his head.

"Oops," Bernal says, removing the ball cap he's wearing.

Bernal had mistakenly grabbed the wrong hat a few minutes earlier. He hops out of the tractor's cab and flicks the hat toward Bryan, who tosses him one in return.

"See you later, Bryan," Bernal says, climbing back into the cockpit. "We're gonna go cut ends from west to east."

Under the blazing afternoon sun, Bernal navigates around a row of older farm equipment. "That particular tractor my dad bought in 1975," he says. "It's gonna stay around here." Bernal continues down an expansive gravel driveway, passing the gray, single-story home he grew up in. A barking dog darts around a fenced yard adjacent to the house.

On the far side of the building, Bernal hangs a right onto Q Road. He begins pointing out the land his family has acquired over the years. His grandparents had 150 acres over there. His parents bought this land here. His great grandparents, who showed up in 1925, lived in a house right there.

Surrounding Bernal's land are the vistas of the Grand Valley, a strip of high desert situated on Colorado's Western Slope marked by dusty mesas and cliffs and the winding, ever-present Colorado River, which plunges down from the mountains to the east. Grand Valley farmers and ranchers use the water to irrigate tens of thousands of acres, growing everything from peaches and corn to wheat and alfalfa.

But since 2000 flows on the river have declined 20% and water levels at Lake Powell and Lake Mead have dropped to less than 30% of their combined storage. With the river overtaxed, Grand Valley farmers now face difficult questions regarding the future of water in Colorado and the West. Questions about how irrigation, which accounts for about 70% of the state's Colorado River water use, can be more efficient, whether water can be conserved and banked in Lake Powell and what, if anything, to do about someone looking to make a buck on the state's most precious resource, socalled water speculators.

In the Grand Valley, much of the concern around private, profit-

Colorado River Compact: 100 years later

EDITOR'S NOTE: This is part of a collaborative series on the Colorado River as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Tribune, The Arizona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- Southwest: <u>Nearing a crisis point</u>
- Colorado: <u>Farming, water and Wall</u> <u>Street</u>
- Mexico: <u>Uncertainty in the dry north</u>
- California: <u>Stressed river keeps</u> desert farms alive
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>
- New Mexico: Make do with less
- Nevada: Looking to conservation
- Tribal nations: <u>State of unease</u>

firm called Water Asset

Management, or WAM. Run by co-

founder Disque Dean Jr., son of a

New York real estate developer,

WAM has spent millions buying farmland with valuable senior water rights in this part of

Colorado farmers face difficult questions over future of river water

- driven investment in the river has • Video: Colorado Basin tribes without focused on a New York investment water rights Video: What the Colorado River
 - Compact got wrong

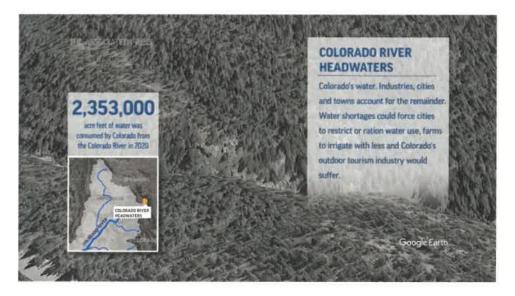
Upcoming stories:

- Utah: Coming Friday
- Wyoming: Coming Friday

Colorado. The company is the largest landowner in the influential Grand Valley Water Users Association, which operates the 55-mile Government Highline Canal. Western Slope farmers rely on the canal to irrigate about 24,000 acres of farmland.

When the New York Times declared in a January 2021 headline that "Wall Street eyes billions in the Colorado's water," Colorado water users voiced significant concern about the company's motives.

"The worry was that a New York hedge fund's outside investors would not have the same economic and sociological calculus in deciding to lease or sell their water as a longtime resident would," Anne Castle, a senior fellow at the Getches-Wilkinson Center for Natural Resources, Energy, and the Environment at the University of Colorado, said. "Generational farmers and ranchers are going to be thinking about the impact on their neighbors, the local communities and what their kids do if the water leaves the ranch."



State politicians looked at addressing private water speculation during the most recent legislative session. Colorado law already requires water be put to a "beneficial use," say, to irrigate a farm, supply taps in cities or be left in the river for environmental or recreational purposes. You can't just buy water rights and sit on them. A draft state bill, however, tried to examine whether it might be viable to curb the sale of water in Colorado purchased specifically to turn a profit later on. But telling people what they can and can't do with their private property rights is a tricky proposition. The bill did not make it beyond the Agriculture and Natural Resources Committee.

Three years ago, Water Asset Management purchased a farm from a landowner who was leasing the land to Bernal, who farms alfalfa, corn and Colorado farmers face difficult questions over future of river water other crops. A member of the water users association board, Bernal has since leased a few other WAM-owned fields. The way he puts it, he's neither WAM's advocate nor their adversary. "I keep saying, 'So far so good,'" Bernal said. "Am I glad they're here? Not really. Would I have invited them in? No. How are they now? They're as good as any landlord I've had."



The Bernal family from left: Joe, holding his grandson, Trevor, standing with his son, Bryan. In the next photo, Joe holds an ear of corn grown at the family's farm in Fruita, Colo. (Hugh Carey, The Colorado Sun)

Water savings programs

A few years ago, through the Grand Valley Water Users, Bernal enrolled some land in a water conservation project known as the System Conservation Pilot Program, sometimes referred to as a "buy and dry" or lease-fallowing program. The project, which ran from 2015 to 2018, was designed partly as a test of how paying farmers to voluntarily and temporarily fallow land might actually look in practice.

Restarting the program was a key part of a plan the Upper Basin states of Colorado, Utah, New Mexico and Wyoming released in June in response to Bureau of Reclamation Commissioner Camille Touton's call to cut between 2 million and 4 million acre-feet of Colorado River water use by next year. The original, four-year Upper Basin program, funded by major water utilities and money from the Walton Family Foundation, spent more than \$8 million and reduced consumptive use by roughly 50,000 acre-feet, according to reports compiled by the Upper Colorado River Commission. In the Grand Valley specifically, the program ran for two years, enrolled about 2,300 acres and saved about 6,000 acre-feet of water.

Colorado's U.S. Sen. John Hickenlooper introduced legislation in late July that would effectively reauthorize the program. If the bill, which has yet to make it out of the Senate, eventually passes, there appears to be money on the other side. The \$4 billion in drought funding included in the Inflation Reduction Act, spearheaded in part by U.S. Sen. Michael Bennet, will be available through the Bureau of Reclamation to pay water users to voluntarily reduce use.

"As we drafted that language, we spent hours on the phone to make sure it worked for our state and for the Upper Basin," Bennet told the audience at Colorado Water Congress in late August. "That would be true of any agreement we make going forward for the Colorado River."

Any water saved under the original version of the conservation pilot program was considered "system" water, meaning it wasn't specifically tracked and no one got credit for whatever extra amount eventually flowed Colorado farmers face difficult questions over future of river water into Lake Powell. It's one of the reasons the Upper Colorado River Commission eventually decided to stop the pilot.

"The commission believes that any viable demand management program requires the ability to accumulate and store conserved water over multiple years. However, no means for accounting, measuring, conveying or storing water have currently been established," a 2018 commission memo halting the program reads. "As such, any water that is currently conserved is subject to downstream water users or release from existing system storage prior to being needed by any emergency drought conditions, thereby defeating the purpose of any demand management."



Joe Bernal drives a tractor on his family's farm on Wednesday, Aug. 31, in Fruita, Colo. (Hugh Carey, The Colorado Sun)

Since then, the commission and the other Upper Basin states have investigated the viability of a demand management program that would give the Upper Basin states credit for banking conserved water in Lake Powell in a 500,000 acre-foot "account" created under the 2019 Drought Contingency Plan. All four states would have to agree on the implementation of that kind of program. Earlier this year, Colorado paused its investigation to let other states catch up with their studies. The Upper Colorado River Commission is slated to release a demand management feasibility report sometime this year.

The difficulty of moving and tracking water from somewhere in the Upper Basin to Lake Powell, a technical process known as shepherding, is one of the reasons the Grand Valley is a popular target for any kind of agricultural water savings program. The valley's proximity to Utah makes it easier logistically to get any conserved water to Powell, more than 150 miles to the southwest on the Utah-Arizona border. As the water flows to the edge of Colorado and through the rest of Utah, the river doesn't pass that many other users.

When Bernal first heard about the pilot program concept, he thought it could open up some useful possibilities for him, a way to optimize his operation. Maybe he could get some guaranteed income. Or maybe this Colorado farmers face difficult questions over future of river water would give him a chance to do some land leveling on a field he wouldn't be able to do otherwise. Heck, maybe he could even just work a little less.

Grand Valley Water Users Association board member Troy Waters, a fifthgeneration farmer north of Fruita, said he was at first resistant to this type of program, but did eventually participate in the initial pilot project and learned a lot by doing so.

"With all the issues that are going on on the Colorado River, I think programs like this might become a necessary evil," Waters said. "I think Colorado is going to have to do their part; even though I still feel this whole mess is the Lower Basin's fault — they created it. The Lower Basin states have just been willy-nilly drainin' them reservoirs."

When Waters decided to enroll some of his land in the initial system conservation program, he purposefully selected a variety of fields, some more productive ground and some less. He said he noticed that it took his land with more fertile soil a couple years to get back to producing the same yield as it did before it was fallowed. "When you fallow ground without irrigating it for a year it hurts your soil," Waters said.

Any compensation for a program like this, Waters said, should pay farmers not just for the fallowed year but also for the time that it takes to get that land back up to full production.

Two basins, one river



The Colorado River flows along Interstate 70 in Glenwood Canyon on Aug. 2021. near Glenwood Springs. Colo. (Hugh Carey, The Colorado Sun)

Since Commissioner Touton told the seven basin states to find a way to cut as much as 30% of the usage on the river, the position among top Colorado water officials has been fairly consistent: Yes, Colorado and the Upper Basin can help, but the majority of water cuts need to come from the place that uses the majority of the water in the Colorado River, the Lower Basin states of Arizona, California and Nevada. Colorado farmers face difficult questions over future of river water

The same day the commissioner made her announcement before a Senate committee, Chuck Cullom, the executive director of the Upper Colorado River Commission, presented provisional numbers showing that Upper Basin water use had declined by about 1 million acre-feet from 2020 to 2021, dropping to 3.5 million acre-feet. At the same time, water use in the Lower Basin increased to roughly 10.5 million acre-feet after accounting for evaporation losses, Cullom said. The figure includes Mexico's allotment.

Sen. Bennet also highlighted this discrepancy during his Water Congress visit. "We know temporary Band-Aids won't cut it," Bennet said. "Any long-term solution requires permanent reduction in use by the Lower Basin. All parties have to live with what the river can provide."

Bernal thinks about that discrepancy, too. "The Lower Basin uses 10.5, we use 3.5 and we're each supposed to get 7.5 — whose problem is this? It's theirs," Bernal said. "Are we going to get away with not helping? I doubt it."

Given that, Bernal said he'd rather have a say in any role Colorado and the Grand Valley will play in efforts to better balance the amount of water used each year with the amount actually flowing through the river. He doesn't want to find out what a federal threat of "unilateral action" could mean. "I don't want to know what that might hold," he said.

Designed correctly, Bernal thinks some kind of water banking program could work in this part of Colorado. "I think a widely distributed water banking program can have a low impact on a community and I think it can still be beneficial to what we're doing."

But he also worries that efforts to decrease water use could alter the character of the place he grew up, a region that includes the deep canyons and red rock formations of Grand Junction's Colorado National Monument. If too much land is fallowed, Bernal is concerned it could negatively impact the local co-op or the seed producer or the trucker who lives down the road or the part-time mechanic he employs or his son Bryan or nephew Mario Baleztena who do this work with him full time.

"Imagine if we didn't have this irrigation system," Bernal said. "There wouldn't be anything to look at but the Monument."

But it's a delicate balance, he said. For instance, he knows the land he leases from Water Asset Management could be enrolled in a restarted system conservation project, bringing new revenue for the owners. "WAM would sure like to see a program," he said.

"It could hurt the entire system if they try to put too much in," Waters said of WAM potentially enrolling land in any future water savings program. Waters said he READ MORE

State of unease: Colorado basin tribes without water rights 4.19 AM MDT on Sep.15, 2022

Nevada looks to conservation as the Colorado River dwindles 4.04 AM MDT on Sep 15. 2022

WATCH: Colorado Basin tribes without water rights 3:26 AM MDT on Sep 15, 2022 Colorado farmers face difficult questions over future of river water would want a program that didn't allow any one individual to enroll too much land or for there to be too much ground fallowed in the valley as a whole.

"If you take out a quarter of the farm ground," Waters said, "if it ain't managed right, this whole valley will turn into a dust bowl."

So far, Waters said, he feels like WAM has been relatively open about what they're doing. "All the ground is being leased and farmed," he said. "I can't say anything bad about them right now. Are they somebody we need to keep our eye on? Yeah."

Public entities

Denver attorney James Eklund, who advises Water Asset Management as a client, last month drafted a letter on Sherman & Howard letterhead titled "a letter of intent to conserve and lease water."

The letter, dated Aug. 10, does not mention WAM, but rather appears to offer to start a sort of water conservation program, to sign up farmers via a "lease conservation agreement" to conserve water. The letter identifies a 5% cost of due diligence to be "borne by the Bureau of Reclamation, other governmental agency, or as provided in the LCA."

Eklund said that in discussions he's had with agricultural water users they wanted to know how they could demonstrate interest in a demand management program, and that he put together what he described as a nonbinding letter of intent as a way for farmers to demonstrate that interest. He said that the 5% was his attempt to "cover the cost of running a program."

"I've been very vocal and supportive of a demand management program," said Eklund, who grew up on a Grand Valley ranch his folks still own and previously served as the state's Colorado River Commissioner. "I didn't find it acceptable that we were just going to say, 'nope, we're blaming other states,' so I put something together on my own letterhead and I went out and started talking to my own family and friends and people we ranch and farm with."

Andy Mueller, general manager of the Colorado River District, said he has significant concerns about the letter Eklund drafted.

"It's unacceptable that a former government official for the state of Colorado would be acting in this way," Mueller said. "If you read all his statements about caring about ag and caring about our community, really what he's doing and what he's showing with this document is that his law firm intends to take a 5% profit off the private market of water. He saw an opportunity to try to set up that private market." trends with reporter Jesse Paul; Colorado's Histo

Mueller said the larger concern is that while the River District and the state examine these kinds of water savings programs from a public interest perspective, other entities might not, and that a program could attract "unscrupulous outside investment which doesn't share the same values about protecting ag."

"It's a real threat," Mueller said, "and anyone who says differently is trying to line their pockets."

The final language in the Inflation Reduction Act, signed by President Joe Biden on Aug. 16, put specific parameters on the drought money. A spokesperson for Bennet said the senator pushed for the language that makes the funding available "to and with public entities or Indian Tribes." The spokesperson said the language was necessary to "protect against speculation of private entities seeking to buy water to make a profit." The specifics of how the funds will be distributed from the Bureau of Reclamation to public entities will be up to the bureau, the spokesperson said.

As for whether Water Asset Management would take part in any kind of water conservation program, Eklund said he hoped they would participate — though he joked that they'd likely be criticized for doing so. "Just as we feared, these terrible New Yorkers are now going to get paid for conserving water," Eklund said in jest. "No, that's exactly what we should hope they would do. We should want to incentivize them as we are incentivizing anyone else in this area to conserve water." Eklund said WAM owns less than 10% of the shares in the Grand Valley Water Users.

Waters, the Fruita farmer, wanted to make it clear that the Sherman & Howard letter has "nothing to do with us." He said the Grand Valley Water Users Association would only work with the state or some other public entity if approached to go in that direction.

As far as next year goes, Bernal said he's proceeding with caution about whether any kind of system conservation program might be up and running through the Grand Valley Water Users. "My hope," he said, "is that we don't screw up what we have going here."

WATCH: What the Colorado River Compact got wrong



Underwritten By

WATER

State of unease: Tribes in the Colorado River basin without water rights

One hundred years after the signing of the Colorado River Compact, many Native American tribes still struggle to fully secure water rights





Rancher Clay Bravo leans against his truck on the Hualapai reservation Tuesday, Aug. 16. 2022. in northwestern Arizona. (AP Photo/John Locher)

Colorado River Compact: 100 years later

State of unease: Tribes in the Colorado River basin without water rights arnett Querta slips on his work gloves as he shifts the big rig he's driving into park. Within seconds, he unrolls a fire hose and opens a hydrant, sending water flowing into one of the plastic tanks on the truck's flat bed.

His timer is set for 5 minutes, 20 seconds — when the tank will be full and he'll turn to the second one.

The water pulled from the ground here will be piped dozens of miles across rugged landscape to serve the roughly 630,000 tourists a year who visit the Grand Canyon on the Hualapai reservation in northwestern Arizona — an operation that is the tribe's main source of revenue.

Despite the Colorado River bordering more than 100 miles of Hualapai land in the canyon, the tribe can't draw from it. Native American tribes in the Colorado River basin have inherent rights to the water, but the amount and access for a dozen tribes hasn't been fully resolved, not for decades.



The 1922 Colorado River Compact that divided the water among states didn't include a share for tribes. Now that the river is shrinking because of overuse, drought and human-caused climate change, tribes want the federal government to ensure their interests are protected.

A water <u>settlement</u> pending in Congress would give the Hualapai Tribe the right to draw river water, plus \$180 million to pipe it to tribal communities and the main tourist center at Grand Canyon West.

"It was the best of a bad deal," said Phil Wisely, the tribe's public services director. "And the thing is, I don't think we could get a better deal, especially now."

The Colorado River can no longer can meet the needs of the 40 million people and \$15 billion agriculture industry that depend on it. The U.S. Bureau of Reclamation recently announced that Arizona, Nevada and Mexico would see deeper cuts to their water supply in 2023. The agency also is asking seven Western states to find a way to conserve more.

Long-standing rights

State of unease: Tribes in the Colorado River basin without water rights The 29 tribes in the Colorado River basin are in fact among the river's most senior water rights holders, a determination often tied to the date the federal government established a reservation. Tribal water rights — once they're fully resolved — could add up to about one-quarter of the river's historic flow, according to the <u>Water & Tribes Initiative</u>.

Unlike other water users, tribes don't lose access to water when they don't use it. A 1908 U.S. Supreme Court decision known as the Winters Doctrine says tribes have the right to enough water to establish a permanent homeland. Often, tribes give up potentially huge water claims in <u>exchange</u> for an assured supply and federal funding to deliver it.

To the northeast of Hualapai, the Ute Indian Tribe has Colorado River tributaries flowing on its reservation east of Salt Lake City. While the tribe has secured some rights, not everyone agrees on how much more it should receive, delaying a settlement for decades.

Ute Indian Tribe leaders say they're tired of reiterating that the federal government needs to protect tribal interests, a duty laid out in treaties and other acts.

Colorado River Compact: 100 years later

EDITOR'S NOTE: This is part of a collaborative series on the Colorado River as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Tribune, The Arizona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- Southwest: Nearing a crisis point
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>
- California: <u>Stressed river keeps</u> <u>desert farms alive</u>
- Colorado: <u>Farming, water and Wall</u>
 Street
- Nevada: Looking to conservation
- New Mexico: Make do with less
- Utah: Desert farms flourish
- Wyoming: <u>Flaming Gorge Reservoir's</u> water recedes
- Tribal nations: <u>State of unease</u>
- Mexico: <u>Uncertainty in the dry north</u>
- Video: Colorado Basin tribes without water rights
- Video: <u>What the Colorado River</u> <u>Compact got wrong</u>

"Until you start to deal with the inequities or the injustice, you can never really have any momentum going forward," said Shaun Chapoose, chairman of the Ute Business Committee.

"You're not resolving that. And they are in a position to do that, they are the federal government."

The situation of both the Hualapai and Ute Indian Tribe highlights the frustration of Native American leaders across the basin that although their rights may not be quantified, they are real.

Other tribes that have secured water rights have pitched in to help their neighbors amid the prolonged drought by conserving water in key reservoirs along the Colorado River. Some lease or exchange water, and use it to sustain the environment, sometimes creating revenue for themselves.

But Jay Weiner, who represents tribes in water settlements, said it would be unjust to continue to rely heavily on tribes when they haven't had access to the water as long as states in the basin. State of unease: Tribes in the Colorado River basin without water rights "The tribes have already front-loaded and sacrificed by the fact that the basin has been able to use huge amounts of water that tribes have rights to over the past 100 years," Weiner said.

In a statement to The Associated Press, the Interior Department did not say how tribal water rights, which are federal rights, would be protected as the river's flow decreases. It said it is working with tribes that are affected by drought.

Hauling water on Hualapai land



Garnett Querta attaches a water hose to his truck on the Hualapai reservation on Aug. 15 in Peach Springs. Ariz. Tape helps keep the rearview mirror from falling off as he navigates dirt roads while hauling water. (John Locher, AP Photo)

Querta's job is a grind but he's well-suited for it — analytical, quick and goal-oriented. He takes meticulous notes on water levels and quality as he fills the tanks that ensure tourists at Grand Canyon West have water.

The truck takes a beating on the gravel and dirt road on multiple round trips of more than 30 miles most days. The side mirrors and back windows that rattled loose are held together by red duct tape. Querta keeps tools on hand for minor repairs. Major ones or illness can put him out of commission.

He was out for two weeks because of COVID-19 last year and had no replacement.

"I didn't mind because I didn't want anybody to mess up my truck or my tanks," said Querta. "I take care of this truck like it's mine."

Once he's filled the tanks on the truck bed, the water is sent through a pipeline from just outside of Peach Springs to Grand Canyon West. The tourist center is crucial. Revenue from it funds tribal programs for the elderly, public works, the cultural center, scholarships and other social services. The main attraction is the Grand Canyon Skywalk — a horseshoe-shaped glass bridge that gives tourists a view of the Colorado River 4,000 feet below.

State of unease: Tribes in the Colorado River basin without water rights

There is not a drop to spare at Grand Canyon West. A restaurant that overlooks the Grand Canyon has waterless urinals in the restrooms and faucets with sensors. Customers are served bottled water and food in disposable containers with plastic utensils, cutting out most of dish washing.

Even if the Hualapai eventually get water from the Colorado River, those practices will stay in place, said operations manager Alvaro Cobia-Ruesga. READ MORE

Residency of Democratic state Senate candidate running in consequential Colorado district is challenged in court

Coloradans can expect political ads to interrupt their TV viewing — and streaming — for the next two months 4 - 8 AM MD1 on Sep 16 2022

Colorado is turning to everyone from Gen Z to retirees as it tries to staff up for expanded preschool in 2023 4 25 AM M07 on Sep 16, 2022

"We see what's going on, we have to conserve water for our future," he said.

The tribe has long planned to expand Grand Canyon West with a store, fire and police station, housing and elementary school to serve tribal members who ride a shuttle up to five hours round trip daily from Peach Springs and surrounding communities to their jobs there.

But without a secure source of water for Grand Canyon West, it won't happen, said tribal Chairman Damon Clarke. Under the settlement pending in Congress, the tribe would be responsible for building out the infrastructure to deliver water.

"One of the biggest things with our settlement is hope for the future and getting this not for us at this time but for the generations ahead," Clarke said.

Part of the reason the Hualapai Tribe did not prioritize discussions on water rights long ago is because tribal members believed that water came with their land, said Rory Majenty, board chairman of the Grand Canyon Resort Corp. that oversees Grand Canyon West.

"We took things for granted," he said. "Like you knew you were going to eat, you knew the sun was going to come up. Tomorrow is another day."

The settlement has its critics, including Hualapai rancher Clay Bravo. He said the tribe should wait, negotiate a better deal and develop groundwater resources at the same time. He's not satisfied with a lower priority water right that he equates to crumbs, given the Hualapai Tribe has been on the land since time immemorial.

"How can we run a race and come in first and get the fourth-place trophy?" Bravo said, leaning against a pickup truck on a rocky road overlooking an old water well that was contaminated with radium.

Even with secure water rights, tribes can't always fully put the water to use because they lack infrastructure. A pipeline eventually will reach the southwestern portion of the Jicarilla Apache Nation in New Mexico State of unease: Tribes in the Colorado River basin without water rights through another tribe's water settlement to boost economic development in the region. Jicarilla Apache has leased water it already has access to for energy production, recreation and conservation, and to benefit threatened and endangered fish. Tribes in the Phoenix area have leased water to nearby cities.

The Colorado River Indian Tribes, whose reservation sits along the river bordering Arizona and California, doesn't have the legal authority to lease its water, though a <u>bill</u> is pending in Congress to authorize it.

"It's our sovereignty and beneficial rights of our water — the full beneficial rights of our water," said tribal Chairwoman Amelia Flores. "We want to lease, we don't want to sell our water, and that's the difference."

What is just?



The sun sets over the Colorado River at Guano Point on the Hualapai reservation Monday, Aug. 15, 2022, in northwestern Arizona. Roughly 600,000 tourists a year visit the Grand Canyon on the Hualapai reservation in northwestern Arizona — an operation that's the tribe's main source of revenue. (AP Photo/John Locher)

The Ute Indian Tribe wants that same ability. The tribe asserts rights to 550,000 acre-feet. (An acre-foot is enough water to serve two to three U.S. households annually). A <u>settlement</u> negotiated 30 years ago recognizes about half of that.

"Utah's position is that's the number we're comfortable with, and we think that does more than enough to satisfy the claims of the Utes," said Utah deputy state engineer Jared Manning.

But the tribe hasn't ratified the settlement. The Utes have sued in federal court over access to water. A judge ruled in one case last year that the tribe waited too long to bring its claims against the federal government and Utah.

Daniel McCool, professor emeritus at the University of Utah, said the larger question is whether the Ute Indian Tribe has been treated justly and whether funding for water diversions have been on par with non-Native American interests. State of unease: Tribes in the Colorado River basin without water rights "There's a reason why the tribe doesn't have much water and why almost all the water in the region is being used by white people," said McCool, who studies tribal water rights. "Look at who got the money, the Central Utah Project. Who got the water? Ask yourself that and ask, 'does this look fair to you?""

It's a question tribal members have posed for decades, whether the first inhabitants of what's now the U.S. should have anything but the oldest, most secure water rights. Inevitably, others will lose water they've grown accustomed to using as tribes gain access to it.

"People have been taking our water. Are they taking it legally or illegally?" Majenty said.

"The argument from the other side is it's capitalism, free enterprise. That's where they got us. Ownership is where it's at. Until you have a piece of paper, it's not yours."

WATCH: Colorado Basin tribes without water rights

© 2022 The Colorado Sun. Proudly powered by Newspack by Automattic



Underwritten By

WATER

Stressed Colorado River keeps California desert farms alive

The nation's most populous state may be forced to give something up in the coming years as hotter and drier weather causes the river's main reservoirs to fall to dangerously low levels.



AP Kathleen Ronayne, AP 3:14 AM MDT on Sep 13, 2022



Irrigator Raul Quirarte, 56, pauses during work to prepare a field to receive water from the All American Canal. (Gregory Bull, AP Photol

Colorado River Compact: 100 years later



Stressed Colorado River keeps California desert farms alive hen Don Cox was looking for a reliable place to build a family farm in the 1950s, he settled on California's Imperial Valley.

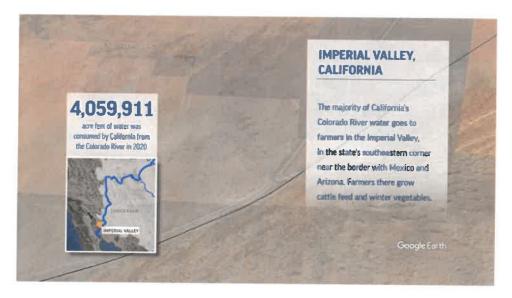
The desert region had high priority water rights, meaning its access to water was hard for anyone to take away.

"He had it on his mind that water rights were very, very important," said his grandson, Thomas Cox, who now farms in the Valley.

He was right. Today the Imperial Valley, which provides many of the nation's winter vegetables and cattle feed, has one of the strongest grips on water from the Colorado River, a critical but over-tapped supply for farms and cities across the West. In times of shortage, Arizona and Nevada must cut first.

But even California, the nation's most populous state with 39 million people, may be forced to give something up in the coming years as hotter and drier weather causes the river's main reservoirs to fall to dangerously low levels. If the river were to become unusable, Southern California would lose a third of its water supply and vast swaths of farmland in the state's southeastern desert would go unplanted.

"Without it, the Imperial Valley shuts down," said JB Hamby, a board member for the Imperial Irrigation District, which holds rights to the largest share of Colorado River water.



A century ago, California and six other states — Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming — created a compact that split the water into two basins and set rules for how much water each would get. A series of deals, laws and court cases that followed led California to get the most water and made it the last to lose in times of shortage.

Fear and frustration over California's use of the river has driven the compact since its early days. In western water law, the first person who taps the source gets the highest right, and California cities and farmers have relied on the river for more than a century.

Other western states worried California would lay claim to all the river's water before their own populations grew. The compact and the series of

deals that followed attempted to find a balance to protect California's supply while ensuring other states got some too. California, meanwhile, benefitted when the federal government began building the Hoover Dam to help control the river's flow.

Today, the states are now gearing up for a 2026 deadline to renegotiate some of the terms to better deal with drought and protect two major reservoirs, Lake Powell and Lake Mead. But before that, the U.S. Bureau of Reclamation has demanded the states find a way to cut their use by roughly 15% to 30% to stave off a crisis. The states failed to meet a mid-August deadline to reach a deal, but negotiations are continuing and no new date for an agreement has been set.

All eyes are on California and its major water rights holders namely the Imperial Irrigation District and Metropolitan Water District of Southern California —

<u>Colorado River Compact:</u> <u>100 years later</u>

EDITOR'S NOTE: This is part of a collaborative series on the Colorado River as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Tribune, The Arizona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- Southwest: <u>Nearing a crisis point</u>
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>
- California: <u>Stressed river keeps</u> desert farms alive
- Colorado: <u>Farming</u>, water and Wall <u>Street</u>
- Nevada: Looking to conservation
- New Mexico: <u>Make do with less</u>
- Utah: Desert farms flourish
- Wyoming: <u>Flaming Gorge Reservoir's</u> water recedes
- Tribal nations: <u>State of unease</u>
- Mexico: <u>Uncertainty in the dry north</u>
- Video: <u>Colorado Basin tribes without</u> <u>water rights</u>
- Video: <u>What the Colorado River</u> <u>Compact got wrong</u>

to see if they will give up some of their share. Both districts say they're willing to use less water or pay others to do so — especially if cooperating means they can avoid challenges to their senior rights.

But they're playing coy about what exactly they're willing to give.

Historically entitled to more

Stressed Colorado River keeps California desert farms alive



A small pond sits between a field irrigated with water from the All-American Canal and a highway, Sunday, Aug. 14, 2022, near Brawley, Calif. The canal conveys water from the Colorado River into the Imperial Valley. (Gregory Bull, AP Photo)

The river is the only water supply for the Imperial Irrigation District, whose farmers grow broccoli, onions, carrots and other winter vegetables as well as alfalfa and other feedstock. The limited water underneath the ground in the region, near California's border with Arizona and Mexico, is not usable, and it does not have access to state water supplies.

The irrigation district was historically entitled to more water than either Arizona or Nevada, though it's given some up over the years in exchange for payment from cities like San Diego and Los Angeles. In 2019, its board rejected a drought contingency plan signed by other water users in Arizona, Nevada and California.

This time around, officials say the district would be open to leaving fields unplanted to save water on a temporary, emergency basis. But neither Hamby nor board spokespeople would say how much.

State officials are looking to the \$4 billion approved by Congress for the Colorado River as a possible source of money that could be used to pay the district and, in turn, farmers, to use less water.

The farmers aren't privy to all of the district's negotiating tactics, but are trying to organize among themselves to avoid having cuts foisted on them, Cox said. Many farmers have already installed drip irrigation lines that use less water, but they would be willing to adopt more conservation tactics if they'd be pa

READ MORE

In Wyoming, Flaming Gorge Reservoir's water recedes as Colorado River Basin contends with drought

Desert farms in Utah flourish with water from Colorado River

State of unease: Tribes in the Colorado River basin without water rights 419-44/MDT cursep-15-2002

more conservation tactics if they'd be paid to do so.

Stressed Colorado River keeps California desert farms alive

Already, Cox said he's making decisions about whether to plant on all of his vegetable fields this fall because he's getting less water than normal under a new system adopted by the board.

"With water uncertainty, there's going to be more uncertainty on food supply," he said.

Salton Sea running dry



Farmer Larry Cox watches a tractor at work on a field at his farm Monday. Aug. 15, 2022, near Brawley. Calif. The Cox family has been farming in California's Imperial Valley for generations. (Gregory Bull. AP Photo)

And it's not just farmers who rely on the Imperial Irrigation District's water. Runoff from the farms feeds the Salton Sea, a massive inland lake created in the early 1900s when the Colorado River flooded. It's now rapidly drying up, exposing surrounding communities to toxic dust and killing the habitat that birds and fish rely on. The state and federal government are now looking for other ways to support the sea in the absence of river water, and its being eyed as a possible site for lithium extraction.

"We're talking about a body of water surrounded by communities who have been marginalized for so (long), that don't have the infrastructure or capacity to protect themselves from climate change, from less availability of water, from more dust," said Silvia Paz, executive director for Alianza Coachella Valley, an organization fighting to improve the economy and health outcomes in the region.

Behind the irrigation district, the Metropolitan Water District is the state's second largest user of the river's water. The Colorado makes up about one-third of the water supply the district uses to provide water for drinking, bathing, landscaping and recreating to roughly half the state's population. Los Angeles County, the nation's largest, is one of the many areas in Southern California that relies on the river's water.

It's allowed to store some of the water it doesn't use in Lake Mead, which California officials say has actually helped stave off a river crisis in recent Stressed Colorado River keeps California desert farms alive years. But this year, short on other supplies, the district may actually try to pull some of that water out if needed, a move that would likely cause friction with other states in the basin.

The district also gets water from the Sacramento-San Joaquin River Delta, the state's main source of water supplies. But the Delta is suffering from drought, too, and the state only approved 5% of requested supplies this year. As it looks to stabilize its water supply for the future, the district is spending billions on a water recycling plant and urging people to use less water for their lawns.

Still, ensuring the Colorado River is available in dry years when other supplies aren't available is the district's priority, said Bill Hasencamp, the district's Colorado River manager.

Farm-heavy water districts in the Coachella Valley and Riverside County also get Colorado River water, which they use for crops like citrus, melons and barley. The Fort Mojave Indian Reservation and Colorado River Indian Reservation are among the tribes in California with river rights.

Looking to the future, both climate change and politics are at play as California's water users debate what it will take to keep the river alive.

"What they really want is reliability and predictability," said Michael Cohen, a Colorado River expert with the Pacific Institute. "What they don't want is Arizona screaming that Phoenix and Tucson are dried up and California doesn't take a drop of reductions."

WATCH: What the Colorado River Compact got wrong

© 2022 The Colorado Sun. Proudly powered by Newspack by Automattic



WATER

Arizona water officials worry about future access to Colorado River

Underwritten By

While cities reliant on the water have backup supplies to cushion them in the short term, talk of cuts leaves long-term picture more uncertain.





The Colorado River flows at Horseshoe Bend in Gien Canyon National Recreation Area on June in Page. Ariz (Brittany Peterson, AP Photo, File)

Colorado River Compact: 100 years later

Arizona water officials worry about Colorado River shortfall obbie Woodhouse's grandfather began nearly a century of family farming along the Gila River near Yuma in the middle 1920s when he dug up a bunch of mesquite stumps on his land to make way for his barley, wheat, Bermuda seed, cotton and melon fields.

Farming never really took off at the Woodhouse homestead until 1954, when the federal government finished a 75-mile-long concrete canal to bring Colorado River water to what's now known as the Wellton-Mohawk Irrigation and Drainage District, which covers about 58,500 acres along the Gila River east of the Colorado.

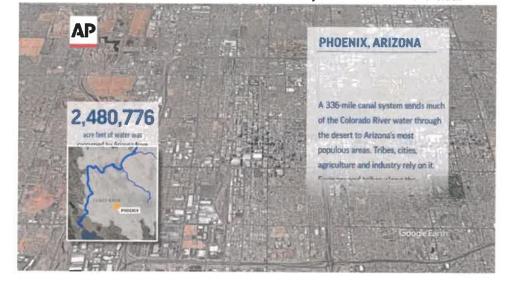
Today, Woodhouse presides over the governing board of a district with more than 120 individual growers, partnerships, trusts and other operating entities growing about 100 different crops, including seed crops as well as staples like wheat, cotton, lettuce and other produce. Wellton-Mohawk is one of six agricultural districts in the Yuma area that together grow 90% of the cauliflower, lettuce, broccoli and other winter vegetables sold in the U.S.

But now, the future of this district, of farming in the Yuma area in general and of Arizona's second largest drinking water supply for urban residents are all mired in a sea of uncertainty. Due to a logjam in interstate negotiations for massive cuts in Colorado River water deliveries, farmers and urban users have no idea how much water use they'll be ordered to cut, possibly starting next year.

All the Yuma area irrigation districts depend entirely on Colorado River water to nourish their crops. While groundwater does lie beneath many of the farm fields, its quality is uncertain or poor in many places.

"Obviously we're very, very concerned," said Woodhouse, whose 1,250 acres grow mostly produce, such as cauliflower, broccoli and lettuce. "Without the water, we don't grow anything. But I wouldn't say we are scared. We do feel an obligation to do our part."

Water officials of Arizona cities of Tucson, Goodyear and Scottsdale are also concerned and a little on edge although they're not panicking. They are the most dependent of Arizona cities on river water delivered through the Central Arizona Project, a \$4 billion, 336-mile-long canal system running from the river to the Phoenix and Tucson areas. Arizona water officials worry about Colorado River shortfall



While all these cities have backup supplies, led by groundwater, to cushion them in the short- to medium-term in the event of river water cuts, their long-term picture is more uncertain because the CAP was extended into Arizona nearly 40 years ago precisely to get them off groundwater.

Arizona got about 36% of its total water supply from the river as recently as 2020. That share of river water feeding farms and cities has declined some since then, with the advent of a federally approved Drought Contingency Plan that will cut the state's river water use by 21% starting in 2023. It's expected to drop even further in the coming years but nobody knows how much right now.

The uncertainty was triggered first in June, when Reclamation Commissioner Camille Touton testified at a U.S. Senate Committee hearing that to stabilize the river's declining reservoirs Lakes Mead and Powell, the basin states need to cut their water use by roughly up to 30% starting in 2023, and come up with a plan to do that by mid-August. If a plan doesn't appear by then, she warned the federal government would impose its own, to "protect the system."

But mid-August came and went with no agreement and no plan or timetable for a plan from the bureau. The bureau did say at an Aug. 16 news conference, however, that it was going to look closely at several measures such as modifying the Hoover and Glen Canyon dams so they can keep delivering water at lower elevations and counting

<u>Colorado River Compact:</u> <u>100 years later</u>

• EDITOR'S NOTE: This is part of a collaborative series on the Colorado River as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Tribune, The Arlzona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- Southwest: <u>Nearing a crisis point</u>
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>
- California: <u>Stressed river keeps</u> <u>desert farms alive</u>
- Colorado: <u>Farming, water and Wall</u> <u>Street</u>
- Nevada: Looking to conservation
- New Mexico: Make do with less
- Utah: Desert farms flourish
- Wyoming: <u>Flaming Gorge Reservoir's</u> water recedes
- Tribal nations: <u>State of unease</u>
- Mexico: <u>Uncertainty in the dry north</u>
- Video: <u>Colorado Basin tribes without</u> <u>water rights</u>

Arizona water officials worry about Colorado River shortfall

evaporation of water from Lake Video: What the Colorado River Mead and the river against the Compact got wrong Lower Basin's total water supply, thereby reducing that supply by hundreds of thousands of acre-feet a year.

So now, Wellton Mohawk and the other irrigation districts are pushing a plan to cut one acre-foot of water used per acre annually, on 925,000 acres along the Lower Colorado River in Arizona and California. In return, they're seeking \$1,500 an acre-foot in compensation, or a total of \$1.387 billion annually.

With that money, they'll invest in water-efficient farming tools like drip irrigation, gradually switch to less thirsty crops from water-slurping alfalfa and weather economic losses from reduced water use, Woodhouse said.

"What we want to have happen is for each individual farmer to operate their farms in the matter that they want to operate and plant the crops that they feel they can maintain the fertility of their soils," he said. "I'm sure it's going to greatly change crop rotations and also change management practices of individual farmers, to exist on less water. It's real important that those decisions be left to each individual farm."

This proposal has been roundly criticized by urban water leaders, however. While saying farms must take the biggest water use curbs because they use 72% of Arizona's water and close to 80% basin-wide, Central Arizona Project officials say the farmers' price tag is unrealistically high and that whatever money is paid should be used strictly to modernize irrigation practices for the long term.

"Anytime anyone wants to sit down with us and talk about it, we're more than willing to do so. But no one has been willing to discuss it," countered Wade Noble, an attorney representing the Yuma-area irrigation districts. "Until we get to that point, our voluntary forbearance of a significant amount of the water we control will remain on the terms we put on the table. We're not going to negotiate with ourselves."

"Complete lack of progress"

Arizona water officials worry about Colorado River shortfall



Tourists carry a kayak up a sandy hill Tuesday, June 7. 2022, in Page, Ariz. As Lake Powell levels drop, recreation is becoming tougher to access as boat ramps and marinas close. (Brittany Peterson, AP Photo, File)

Where both Arizona farms and cities agree is that the other river basin states and the federal government haven't moved fast enough to reduce water use.

"Reclamation has got to show some leadership and say this has got to be done and give us a guide map as to how the system is protected as the commissioner promised what it would be," Noble said.

The CAP's board president Terry Goddard and its previous president Lisa Atkins wrote a letter on Aug. 19 to Interior Secretary that made essentially the same point. To date, no written response from Interior has been forthcoming.

With no action forthcoming on a deal, some Arizona water users have pulled back on past commitments to leave water in Lake Mead to prop it up. The Tucson City Council, for instance, had pledged earlier this year to leave 30,000 acre-feet in the lake in 2022 and 2023 but has since backed off that pledge and voted to order its full allocation of 144,191 acre-feet for 2023 pending the negotiations' outcome. The Gila River Indian Community withdrew an even larger commitment, to leave nearly 130,000 acre-feet in Mead next year. The CAP is holding onto 35,000 acre-feet it was going to leave in Mead and announced plans to remove another 18,000 acre-feet from the lake next year.

"Unfortunately, the community has been shocked and disappointed to see the complete lack of progress in reaching the kind of cooperative basinwide plan necessary to save the Colorado River system," said Gila River Indian Community Chairman Stephen Roe Lewis.

Until now, it's left almost 600,000 other acre-feet of its CAP supply in Mead since 2016. In 2022 alone, CAP users and other Arizona Colorado River users left nearly 800,000 acre-feet in Mead, led by 512,000 acre-feet it legally had to leave there under the terms of the 2019 Drought Contingency Plan due to the lake's falling levels. Arizona and California Arizona water officials worry about Colorado River shortfall left another 268,000 acre-feet in the lake this year from what's called the "500 Plus Plan," which had sought a half-million acre-feet in voluntary contributions to the lake, but projections for next year show more water will be removed from the lake under that plan than will be left in it.

Arizona cities prepare for shortfalls



Water from the Colorado River diverted through the Central Arizona Project fills an irrigation canal in Maricopa, Ariz. (Matt York, AP Photo, File)

Many Arizona cities using river water are preparing for the inevitability they'll have to use less. In Goodyear, in the Phoenix area's West Valley, whose population is about 101,000, the city has recharged about half of its annual CAP supplies into the ground for several years. It's also been recharging treated sewage effluent into the ground, and has stored a total of seven years' supply of both sources. It anticipates no short-term problems in delivering water to customers, said Ray Diaz, Goodyear's water resources and sustainability manager.

Colorado River shortfalls aren't going to affect what the city does now but could in the future.

"What would happen if we were shorted and had to continue our approved development?" said Diaz. "It's something we would have to look into and really assess what we could afford for the future — how much water we can provide."

The future of the dwindling Colorado River; The I

In Scottsdale in the Phoenix area's East Valley, CAP supplies about 70% of the water for its 250,000 residents. Most is delivered directly to homes and https://coloradosun.com/2022/09/13/arizona-access-colorado-river-water/

Arizona water officials worry about Colorado River shortfall businesses rather than recharged. If the city had to sustain a large cut in CAP supplies, it would have to rely much more heavily on groundwater, said Gretchen Baumgardner, the city's water policy manager.

It has stored about 230,000 acre-feet of CAP water and treated sewage effluent in the ground — about 2.5 years worth of its current supply — but town officials don't want to use it all at once, Baumgardner said. It also gets about 15% of its supply from Salt and Verde River surface supplies, delivered by the quasi-public utility the Salt River Project.

"There will be a larger portion of groundwater" used in the future, said Baumgardner, adding that city officials won't know how much until they learn how drastic the cuts in CAP deliveries will be.

🔅 READ MORE

The city is also looking to extend its supply further. Its wastewater treatment plant in North Scottsdale operates a pilot project to treat a small amount of effluent to exceed state drinking water standards, a process called "direct potable reuse." The city is working with the State Department of Environmental Quality to help set up new state regulations that would allow the plant to reuse its wastewater for drinking on a larger 419 AM MDT on Sep 15, 2022 scale.



But when asked if a "Day Zero" could ever arrive in which Scottsdale failed to meet all residents' demands for water, Baumgardner replied, "It's just one of those uncertainties right now. That will really be hard to answer," in part because of a pending effort by federal officials to overhaul its guidelines for operating its reservoirs — an effort that won't be finished until 2026.



The community has been shocked and disappointed to see the complete lack of progress in reaching the kind of cooperative basinwide plan necessary to save the Colorado River system.

— Gila River Indian Community Chairman Stephen Roe Lewis

In Tucson, officials of the Tucson Water utility are more optimistic about their ability to survive major CAP cuts. The utility about 40 years ago signed up to take almost a third more CAP water than it needs today to serve the 735,610 customers living inside and outside city limits. That's allowed it to store nearly five and a half years worth of CAP in large, recharge basins — water that can be pumped when needed during CAP shortages later. The utility also has access to a huge aquifer lying under a large expanse of former farmland northwest of the city that it bought and retired in the 1970s. It also is regularly recharging and storing

Arizona water officials worry about Colorado River shortfall underground large amounts of partially treated effluent that can be pumped later for drinking.

But there is one cautionary note. A recent Bureau of Reclamation study found that as the Southwest's climate warms up, runoff of melting snows into rivers and washes surrounding the city is likely to decline, meaning less water will be replenishing its aquifer than in the past. That would increase the possibility that groundwater pumping in place of CAP water use could put increased pressure on the aquifer, triggering higher pumping costs and more likelihood of subsidence in which the ground collapses, possibly triggering fissures.

Ultimately, the story of CAP water in Arizona is a story about groundwater, added Kathryn Sorensen, a researcher for Arizona State University's Kyl Center for Water Policy. When there's less Colorado River water delivered to Arizona, the cities, farms and other users fall back on groundwater, she said.

"We are very blessed to have plentiful aquifers in central Arizona we can fall back on," Sorensen said while noting they are fossil aquifers, meaning water entered them thousands of years ago and they are not easily replaced.

"If we pump them and are unable to replenish the pumping, the aquifers will pay the price," she said.

WATCH: What the Colorado River Compact got wrong

© 2022 The Colorado Sun. Proudly powered by Newspack by Automattic



Underwritten By

WATER

New Mexico officials grapple with how to make do with less Colorado River water

New Mexico is expecting more pressure on its Colorado River water as more tribes reach water rights settlements and build out infrastructure

Theresa Davis, The Albuquerque Journal 4:25 AM MDT on Sep 14, 2022



Researchers at the New Mexico State University Agricultural Science Center in Farmington, N.M., swathe alfalfa on July 22, 2020. Colorado River tributaries in New Mexico bring water to the alfalfa fields in the Four Corners and the forested hills of the Gila wilderness in the southwestern part of the state. (Anthony Jackson The Albuquerque Journal)



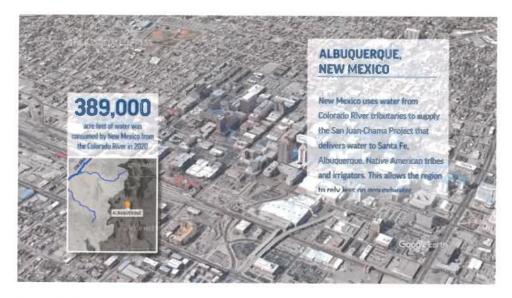


New Mexico officials grapple with how to make do with less Colorado River water olorado River tributaries in New Mexico bring water to the alfalfa fields in the Four Corners and the forested hills of the Gila wilderness in the southwestern part of the state.

But Colorado River and reservoir management was designed during a much wetter period.

And now, water officials are grappling with how to make do with less.

State Engineer Mike Hamman, New Mexico's top water manager, said the state "really feels the shortages" because it doesn't have the big reservoirs of other states in the Colorado River Basin.



"That's the dilemma — looking at how we can reduce demand with as soft a blow as possible," Hamman said.

U.S. Bureau of Reclamation Commissioner Camille Touton this year tasked Colorado River states with creating an ambitious conservation plan.

Touton said the states need to conserve an additional 2 to 4 million acre-feet of water next year to protect levels at Lake Powell in Arizona and Utah and Lake Mead in Nevada and Arizona.

A <u>basinwide conservation plan</u> <u>had not materialized by the mid-</u> <u>August deadline</u>.

Nevada, Arizona and Mexico will all receive less water from the Colorado River next year because of rapidly-declining reservoirs, the Interior Department announced on Aug. 16.

Colorado River Compact: 100 years later

• EDITOR'S NOTE: This is part of a collaborative series on the Colorado River as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Tribune, The Arizona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- Southwest: Nearing a crisis point
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>
- California: <u>Stressed river keeps</u> <u>desert farms alive</u>
- Colorado: <u>Farming, water and Wall</u> Street
- Nevada: Looking to conservation
- New Mexico: <u>Make do with less</u>
- Utah: Desert farms flourish
- Wyoming: <u>Flaming Gorge Reservoir's</u> water recedes

New Mexico officials grapple with how to make do with less Colorado River water

Interior officials did not issue any mandatory water cuts for New Mexico.

- Tribal nations: <u>State of unease</u>
- Mexico: <u>Uncertainty in the dry north</u>
 Video: <u>Colorado Basin tribes without</u>
 <u>water rights</u>
- Video: What the Colorado River Compact got wrong

But the state's existing water conservation programs could be under increased scrutiny.

The <u>Upper Basin states of New Mexico, Colorado, Utah and Wyoming did</u> <u>release a five-point plan</u> this summer that points to the region's "limited" conservation options.

For two years, the states have released additional water from at least three reservoirs — including New Mexico's Navajo Reservoir — to prop up Lake Powell levels.

Those Upper Basin reservoir releases will likely continue next year, Interior officials said.

A more arid climate means all water users need to work harder to "live within our means," said Estevan López, New Mexico's representative on the Upper Colorado River Commission.

The future of the dwindling Colorado River; The I

"It certainly seems that we have to reset our expectations for what we might be trying to get out of the river," said López, a former Reclamation commissioner.

The Upper Basin plan hinges on existing conservation programs.

Strategies include fallowing fields and making irrigation more efficient.

But the entire region must work together, López said, to avoid more mandatory cuts.

"If we can get water users within places like the San Juan Basin to agree to shortage sharing agreements, then there's no need for strict priority administration," he said. "It's a more acceptable solution, generally." New Mexico officials grapple with how to make do with less Colorado River water



The Animas River flows in Farmington, N.M., on July 22, 2020. The river is a tributary of the San Juan River, part of the Colorado River System. (Anthony Jackson, The Albuquerque Journal)

Two different water supplies

Colorado River tributaries serve relatively small portions of northwest and southwest New Mexico.

But the basin's water is essential for the state's largest city: Albuquerque.

Rio Grande flows in Albuquerque are closely tied to the Colorado via the San Juan-Chama Drinking Water Project.

The system of tunnels and dams at the New Mexico state line diverts water into the Rio Grande Basin.

Albuquerque's municipal supply is entitled to as much as 15 billion gallons of San Juan-Chama water every year.

David Morris, the water utility spokesman for the city and county, said the Colorado River water has allowed the region to wean itself off of unsustainable groundwater pumping.

Since 2008, aquifer levels underneath the city have rebounded as much as 40 feet.

"That's exactly what we were hoping that our use of surface water would allow the aquifer to do," Morris said. "We're in a very READ MORE

In Wyoming, Flaming Gorge Reservoir's water recedes as Colorado River Basin contends with drought

Desert farms in Utah flourish with water from Colorado River

fortunate situation here in Albuquerque to have two different and distinct sources of supply."

New Mexico officials grapple with how to make do with less Colorado River water But Colorado River cutbacks have led to several consecutive years when the utility and other New Mexico entities have received far less water than expected from the inter-basin project.

"It's important for us to invest in things like outdoor water conservation and reuse," Morris said. "It's quite possible that there just won't be as much San Juan-Chama water available in the future because of drought and climate change."



The Gila River flows south of Cliff, N.M., on June 19, 2019. Colorado River tributaries in New Mexico bring water to the alfalfa fields in the Four Corners and the torested hills of the Gila wilderness in the southwestern part of the state. (Robert Browman. The Albuquerque Journal)

Tribal sovereignty

The Colorado River Compact was signed in 1922 — just 10 years after New Mexico became a state.

New Mexico still uses only about half of its allotment under the compact each year.

That could change as more tribes reach water rights settlements and build out infrastructure to use those rights.

Agencies are making progress on large projects to deliver water to Navajo communities in western New Mexico.

A resilient future on the Colorado must have tribal sovereignty at the forefront, said Daryl Vigil, Jicarilla Apache Nation water administrator and a staunch advocate for tribal inclusion in water management issues.

"The term 'consultation' gets thrown around in the basin a whole lot," Vigil said. "But if you know one tribe, you only know one tribe. Having a seat at the table means working with every tribe to learn their specific water rights and needs."

The U.S. Interior Department has said it will engage with tribes in the basin as parties hammer out some management details of the compact

New Mexico officials grapple with how to make do with less Colorado River water that are set to expire after 2026.

A historic influx of funding for infrastructure and drought response could also help New Mexico and other basin states reduce water use and prepare for a drier future.

"I'm optimistic that we're going to sort through some of these more sticky problems with a good collaborative solution," Hamman said.

WATCH: What the Colorado River Compact got wrong

© 2022 The Colorado Sun. Proudly powered by Newspack by Automattic



Underwritten By

WATER

Nevada looks to conservation as the Colorado River dwindles

Unlike other states of the Colorado River Basin, Nevada has one main river user: Las Vegas, which uses 90 percent of the state's allocations

Daniel Rothberg, The Nevada Independent 4:04 AM MDT on Sep 15, 2022



Dry, cracked land that was once under water at Lake Mead Marina is visible on Thursday, Aug. 4, 2022. Negotiations over the Colorado River have become increasingly difficult for the seven states that rely on the shrinking river and its reservoirs. including Lake Mead, which is dropping to critically low levels. (Jeff Scheid/Nevada Independent via AP)

Colorado River Compact: 100 years later

nly a few miles from the Las Vegas Strip, in the Mojave Desert, is an unlikely scene: A county park with walking trails and thick vegetation that circles a vibrant rush of flowing water.

Known as the Las Vegas Wash, the water running through this channel is a crucial part of how Nevada has managed to keep its net Colorado River use below its allocation, despite booming population growth and two decades of persistent drought, worsened by a changing climate.

Every time a shower or a faucet is turned on in Las Vegas, the water flowing down the drain is treated at wastewater plants and recycled. The treated water is discharged into the wash, which flows into Lake Mead, a declining Colorado River reservoir held back by the Hoover Dam. Once there, the water can be used for a second time, effectively increasing Nevada's overall portfolio.

"It allows Las Vegas to exist in its present form," said John Hiatt, a conservationist who sits on a coordination committee for the wash. "[Without it], we'd be half our size and really struggling."



When the Colorado River Compact was negotiated in the early 1900s, only about 5,000 people lived in Clark County, home to Las Vegas. Few envisioned the massive growth that has turned the desert into a sprawling paved landscape of nearly 2.2 million people — and growing.

Accordingly, the compact gave Nevada the smallest cut of the Colorado River: 1.8 percent, or just 300,000 acre-feet (an acre foot is the amount of water needed to fill an acre to a depth of one foot). The small share has meant Nevada has long had to live on a tight water budget and rely on conservation measures that are only now being considered by other Western states.

Unlike other states, Nevada has one main river user: Las Vegas. It is responsible for more than 90 percent of the state's diversions, with additional water going to the Fort Mojave Indian Tribe, whose rights were recognized in a 1963 Supreme Court case, and other small water users.

For decades, Las Vegas has relied on wastewater recycling and removing water-guzzling lawns to stretch and conserve its small Colorado River share. But even with proactive management, it could face significant challenges and uncertainties when it comes to future population growth.

"We still have some room with the water resources we have today," said Assemblyman Howard Watts, a Democrat who has worked on water issues for years, including in the Legislature. "But eventually we're going to reach a point where we're going to go past that limit and that's when we really have to consider what a sustainable path is for Southern Nevada moving forward."

Many of the Southern Nevada Water Authority's future planning scenarios are premised on an

Colorado River Compact: 100 years later

EDITOR'S NOTE: This is part of a collaborative series on the Colorado River as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Tribune, The Arizona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- Southwest: <u>Nearing a crisis point</u>
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>
- California: <u>Stressed river keeps</u> <u>desert farms alive</u>
- Colorado: <u>Farming, water and Wall</u> <u>Street</u>
- Nevada: Looking to conservation
- New Mexico: Make do with less
- Utah: <u>Desert farms flourish</u>
- Wyoming: <u>Flaming Gorge Reservoir's</u> water recedes
- Tribal nations: <u>State of unease</u>
- Mexico: <u>Uncertainty in the dry north</u>
- Video: Colorado Basin tribes without water rights
- Video: <u>What the Colorado River</u> <u>Compact got wrong</u>

ability to collaborate with other states to augment Las Vegas's current supply. Yet negotiations over the Colorado River have become increasingly difficult for the seven states that rely on the shrinking river and its reservoirs, including Lake Mead, which is dropping to critically low levels.

Nevada, even though it has a small slice of the Colorado River, has a huge stake in those talks. Las Vegas is reliant on the Colorado River. It's the source of about 90 percent of the city's water supply. The remainder comes from a local groundwater aquifer, which was historically overused.

Any other water in Nevada is far away. For years, Las Vegas had looked to import rural eastern Nevada groundwater hundreds of miles away as a potential supply. But local water managers shelved the controversial plan in 2020 amid legal challenges and concerns about environmental impacts. While it still owns ranches in eastern Nevada, the water authority has said its focus is on supplementing its supply through collaboration, including a recycling project in California. Nevada looks to conservation as the Colorado River dwindles



A person is reflected in a window as they walk across Hoover Dam at Lake Mead on June 26 near Boulder City, Nev. (John Locher, AP Photo, File)

How Southern Nevada has managed to grow, thus far, on such a tight supply has everything to do with the Las Vegas Wash, which empties into Lake Mead. Colby Pellegrino, deputy general manager of the Southern Nevada Water Authority, described the natural stream as something of a "a silent miracle." The wash enabled Las Vegas to scale-up one of the largest municipal water recycling programs in the nation — and increase its Colorado River share by about 85 percent.

Because nearly all indoor water in Southern Nevada is treated and returned to the wash, it has allowed Las Vegas to focus its conservation efforts on aggressive turf removal. This, combined with water recycling, has meant that Nevada has under-used its Colorado River apportionment.

As of Aug. 29, the state was forecast to use about 241,490 acre-feet of water, about 20 percent less than its 300,000 acre-foot allocation. Nevada, as a result, can easily absorb an 8 percent cut to its water supply next year without any significant changes to municipal water deliveries.

As for future growth, Pellegrino said "it depends on how we grow."

"The future of our growth has to have the smallest water footprint possible," she added.

Las Vegas is preparing for the realities of a shrinking river by setting even deeper restrictions for conservation — with a target goal of decreasing per capita water use from about 110 gallons per capita per day to 86 gallons per capita per day by 2035. The water authority's plan for doing so includes a transition from evaporative cooling, pool size limits and prohibiting new golf courses.

But with only 1.8 percent of the Colorado River, Las Vegas cannot fix the problem on its own. In a recent letter, water authority General Manager John Entsminger called for swift cuts aimed at stabilizing the Colorado River's reservoirs while longer-term agreements can be negotiated. The Nevada looks to conservation as the Colorado River dwindles

water authority has also led on pushing states to incorporate climate change in their planning.

Hiatt, on the Las Vegas Wash Coordination Committee, came to Southern Nevada in the 1970s, when the population of Clark County was about 350,000 people. He said he is concerned about what a future might look like as climate change continues altering the river's flows. If conserved water is only re-dedicated to new growth, he worries "we're going to be in the same position of pushing against our allotment — and our allotment may be significantly lower than it is now."

"It's hard to believe anyone is going to come out with more water," he added.

^{© 2022} The Colorado Sun. Proudly powered by Newspack by Automattic

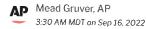


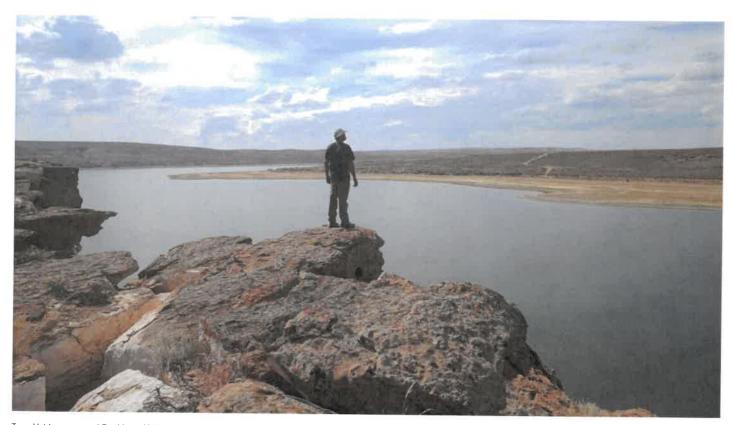
Underwritten By

WATER

In Wyoming, Flaming Gorge Reservoir's water recedes as Colorado River Basin contends with drought

A boating and fishing paradise on the Utah-Wyoming line is beginning to feel the effects of the two-decade megadrought gripping the southwestern U.S.





Tony Valdez, owner of Buckboard Marina, looks over Flaming Gorge Reservoir in southwestern Wyoming on Thursday, Aug. 4, 2022. (AP Photo/Rick Bowmer)

Colorado River Compact: 100 years later

ony Valdez wasn't worried about being left high and dry when he bought Buckboard Marina three years ago, but that's changed with the receding waters of Flaming Gorge Reservoir. Flaming Gorge loses water as drought felt higher up Colorado River This year, he has already dredged 10 feet so boats could still use the marina. Now, with Flaming Gorge becoming a crucial emergency water supply for the region, Valdez worries the reservoir has nowhere to go but lower still.

"I mean, this is our natural resource and it's going away," he said. "Water is the most precious thing we have."

As a 20-year drought creeps ever farther up the Colorado River Basin and seven Western states vie for their fair share of water under the century-old Colorado River Compact, this boating and fishing paradise on the Wyoming-Utah line is a new flashpoint.



Nobody disputes the root of the problem: The agreement dates to a cooler, wetter time and is based on assumptions about precipitation that simply no longer apply, in part due to climate change.

But as business owners like Valdez are finding out firsthand, recreation is just one of many competing priorities while growing demand in the basin's more populous downstream states — California, Nevada and Arizona — conflicts with dwindling supply from the more rural states upstream — Utah, Colorado, New Mexico and Wyoming.

Amid jostling by farmers, ranchers, businesses, industries, municipalities and government officials, it's anyone's guess who will come out ahead or get left behind — including natural ecosystems that need water, too.

"It's a complicated mess. And right now the environment is akin to a snake den because everybody is just out for themselves," said Kyle Roerink, director of the Great Basin Water Network conservation group.

<u>Colorado River Compact:</u> <u>100 years later</u>

EDITOR'S NOTE: This is part of a collaborative series on the Colorado River as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Tribune, The Arizona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- Southwest: <u>Nearing a crisis point</u>
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>

Flaming Gorge loses water as drought felt higher up Colorado River

In August, U.S. Bureau of **Reclamation Commissioner** Camille Touton agreed for now to let Upper Basin states keep working together on drought plans that emphasize voluntary water conservation rather than have the bureau dictate reservoir releases.

That's a decision welcomed by Wyoming State Engineer Brandon Gebhart, the state's chief water regulator. "Reclamation reinforced a position that Wyoming has long agreed with," Gebhart said. "The

- California: <u>Stressed river keeps</u> desert farms alive
- Colorado: <u>Farming, water and Wall</u> Street
- Nevada: Looking to conservation
- New Mexico: Make do with less
- Utah: Desert farms flourish
- Wyoming: <u>Flaming Gorge Reservoir's</u> water recedes
- Tribal nations: <u>State of unease</u>
- Mexico: <u>Uncertainty in the dry north</u>
- Video: Colorado Basin tribes without water rights
- Video: <u>What the Colorado River</u> Compact got wrong

solution to our challenges relies on the bedrock of a century of collaboration and partnership."

Gebhart acknowledged, though, that continued drought could lead to an even lower Flaming Gorge, with the next decision about any new drawdowns due in April.

Fed by the Green River and rimmed by spectacular cliffs and scrubby desert, Flaming Gorge is by far the biggest reservoir in the Upper Basin, which refers to the vast area covering all waters upstream of Lees Ferry on the Colorado River in northern Arizona.

Built in the 1960s to store and control water in the Green River, which flows into the Colorado in southeastern Utah, Flaming Gorge is the Colorado River system's third-biggest reservoir. It's now about 75% full, compared to just 25% or so in Lake Mead and Lake Powell, the bigger reservoirs downstream.

Snaking over 66 square miles (170 square kilometers) south of Green River, Wyoming, Flaming Gorge remains a renowned spot to catch giant lake trout or take a boat to a secluded cove for a dip in cool, aquamarine waters.

Just be careful about jumping in at places that were deeper a few years ago.



"This is our natural resource and it's going away. Water is the most precious thing we have."

- Tony Valdez, Buckboard Marina at Flaming Gorge Reservoir

In April, the Bureau of Reclamation announced that under a drought plan for the Upper Basin states, it would release enough water to draw down Flaming Gorge by 15 feet (4.6 meters). The goal is to help ensure that Glen Canyon Dam in northern Arizona can still generate electricity some 450 miles (725 kilometers) downstream.

Flaming Gorge loses water as drought felt higher up Colorado River So far, drawdowns this year and last have left Flaming Gorge about 6 feet (1.8 meters) lower than a year ago and 12 feet (3.7 meters) lower than two years ago, reaching lows unseen since 2005.

Besides boats not being able to use his marina, Valdez worries about the reservoir's kokanee salmon, which are important food for prized lake trout and tasty game fish in their own right.

Lately, kokanee numbers have been down for unknown reasons. The trend could continue as the reservoir falls, reducing spawning habitat and causing lake trout to eat more kokanee, said Wyoming Game and Fish Department Regional Fisheries Supervisor Robert Keith.

"As the reservoir drops, the available habitat for the two species is going to become compacted, so they're going to overlap more," Keith said. "So the opportunity for predation is going to be greater."



Campers are parked along the receding edge of Flaming Gorge Reservoir on Firehole Canyon on Friday, Aug. 5, 2022, in Wyoming. (Photos: Rick Bowmer, AP)



A sign cautioning fluctuating water levels is displayed at Firehole Canyon on the far northeastern shore of Flaming Gorge Reservoir.

Although Wyoming uses only about 60% of the water it's entitled to under the compact, Gebhart says the Upper Basin states have little to spare given recent flows.

The vast majority of Colorado River Basin water used in Wyoming goes to irrigating grass and alfalfa for cattle. Industry — mainly power plants and minerals processing — accounts for about 9% and cities and towns about 3%.

More conservation by southwestern Wyoming's 2,500 water rights holders could help keep water in the system. For example, ranchers can install more efficient irrigation with assistance from government grants and other funding, said Cory Toye with Trout Unlimited.

The fish habitat and angler advocacy group has been working with ranchers on such projects in Wyoming for years and the Flaming Gorge drawdowns have heightened awareness of the problem, Toye said.

States in the compact have been funding efforts to boost snowfall by releasing silver iodide from airplanes and ground-based devices in Wyoming and elsewhere in the Rocky Mountains.

Cloud seeding can increase snow somewhat, <u>research shows</u>. But the technique is unlikely to fully offset or reverse drought or bring Flaming Gorge back up from levels threatening Buckboard Marina.

Flaming Gorge loses water as drought felt higher up Colorado River Lucerne Valley Marina, just south of the Utah line, will need to adapt if levels keep falling but could still operate.

The future of the dwindling Colorado River; The I

"We're anchoring in 200 feet (61 meters) of water when full," owner Jerry Taylor said. "We have quite a bit of ability for lake drop. But Buckboard does not."

In a worst-case scenario, Buckboard would be stranded some distance away from where the Green River flowed more than 60 years ago.

For now, Valdez hopes to lure back tourists who've stayed home amid high gasoline prices and the lower water. And he says Wyoming residents also need uncrowded places like Buckboard to enjoy.

"People just don't get raised like this anymore, get to hunt and fish," Valdez said. "And have a sustainable source of water."

© 2022 The Colorado Sun. Proudly powered by Newspack by Automattic



Underwritten By

WATER

Desert farms in Utah flourish with water from Colorado River

Compared to neighboring states, Utah is less dependent on water from the river. Still, the state is aggressively pursuing conservation measures.



Zak Podmore, Salt LaKe Tribune 3:03 AM MDT on Sep 16, 2022



Benny and Faith Martens float on the water at the Great Salt Lake on Sept. 6 near Salt Lake City. About 27% of the water used in Utah comes from the Colorado River, with the majority of the state's water supply coming from other rivers that feed into the Great Salt Lake. (Rick Bowmer, AP Photo)

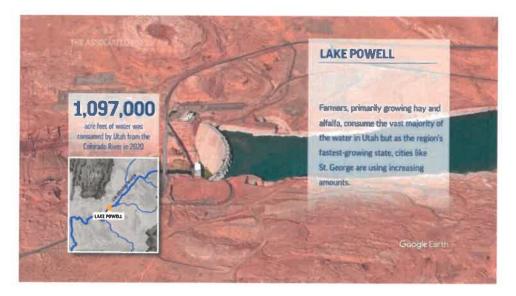
Colorado River Compact: 100 years later

he second driest state in the country, Utah, doesn't contribute much water to the Colorado River as it flows from Rocky Mountain headwaters through Canyonlands National Park to Lake Powell.

Utah has a unique position in the middle of the river basin, geographically and politically, and it wields less influence than thirstier and more populous states like Colorado, California and Arizona.

Its sprawling urban centers along the Wasatch Front, which are home to 80% of the state's population, are outside of the Colorado River Basin and are less dependent on the river than cities like Phoenix or Las Vegas. Only 27% of the water used in Utah comes from the Colorado River, with the majority of the state's water supply coming from other rivers that feed into the Great Salt Lake.

Under a 1948 agreement, Utah is entitled to 23% of the water used by the four states in the upper Colorado River Basin — receiving less water than Colorado but more than either Wyoming or New Mexico — and it typically uses around 1 million acre-feet of water from the Colorado annually.



For decades, Utah has sought to develop diversions from the river by pursuing projects like the controversial Lake Powell pipeline, which would transport 86,000 acre-feet of water from the reservoir to St. George and surrounding areas. But the state's use has remained relatively static since 1994 despite its fast-growing population.

Twenty-two years of drought in the basin have caused the Bureau of Reclamation to put more pressure on Utah and the six other Colorado River states to reduce use and abandon development plans, however, and the states are gearing up for renegotiations of

Colorado River Compact: 100 years later

EDITOR'S NOTE: This is part of a collaborative series on the Colorado River as the 100th anniversary of the historic Colorado River Compact approaches.

The Associated Press, The Colorado Sun, The Albuquerque Journal, The Salt Lake Desert farms in Utah flourish with water from Colorado River

water use guidelines that expire in 2026.

Utah's designated representative in the discussions, Colorado River Commissioner of Utah Gene Shawcroft, said the drought has made planning difficult.

"It's hard to look out four or five years if you can't see past next spring," Shawcroft said. "Part of our challenge all along has been to really focus on the renegotiations when we're faced with such a critical day-to-day situation."

Shawcroft said Utah is committed to planning for 2026 while also participating in more immediate water negotiations such as the Bureau of Reclamation's call for Tribune, The Arizona Daily Star and The Nevada Independent are working together to explore the pressures on the river in 2022.

Check out each state-by-state story:

- Southwest: <u>Nearing a crisis point</u>
- Arizona: <u>Water officials worry about</u> <u>future access to Colorado River</u>
- California: <u>Stressed river keeps</u> desert farms alive
- Colorado: <u>Farming, water and Wall</u> <u>Street</u>
- Nevada: Looking to conservation
- New Mexico: Make do with less
- Utah: Desert farms flourish
- Wyoming: <u>Flaming Gorge Reservoir's</u> water recedes
- Tribal nations: State of unease
- Mexico: Uncertainty in the dry north
- Video: <u>Colorado Basin tribes without</u> <u>water rights</u>
- Video: <u>What the Colorado River</u> <u>Compact got wrong</u>

water users across the basin to reduce use by as much as 30% next year to stabilize rapidly depleting levels in lakes Powell and Mead.

Utah is aggressively pursuing conservation measures through a broad suite of state legislation passed this year, Shawcroft added, including a law that allows farmers to forgo irrigation without losing their water rights. But he said bringing the system back into balance will likely require the biggest cuts to come from the largest water users in downstream states.

Jack Schmidt, director of the Center for Colorado River Studies at Utah State University, said that since 2001 agriculture has used over two-thirds of the Colorado River water in Utah. An additional 15% is pumped out of the basin, primarily to supply the Wasatch Front.

Over 300,000 acres of land in the state are irrigated with Colorado River water, mostly to grow forage crops to feed livestock like alfalfa.



Crops are irrigated in Moab, Utah, Thursday, July 15, 2021. (Trent Nelson/The Salt Lake Tribune via AP)

"In light of the fact that 70% of the total Colorado River water is used by (agriculture)," Schmidt said, "it's hard to imagine that agriculture won't be taking the most significant cuts."

But reductions in water use don't necessarily have to hurt farmers' bank accounts. "Agriculture very well might be fairly compensated for fallowing its fields," he said.

Environmental groups like the Utah Rivers Council have pointed to Utah's residential water use — the highest in the basin, per capita — and low water rates as evidence that more conservation in that sector is possible and needed.

The potential retirement of coal plants in Utah in the next decade, which use 6% of the Colorado River water, could also free up some supply for conservation or other uses.

Another consideration is tribal water rights in Utah, which must be satisfied through the state's share of Colorado River water.

A court decree has recognized the Ute Indian Tribe's right to 144,000 acrefeet of water, but the tribe may receive far more water if it settles its water rights claims with the state and the federal government.

The Utah portion of the Navajo Nation settled its water rights in May and has a recognized right to 81,500 acre-feet.

Navajo Nation President Jonathan Nez said his administration's priority is to supply the thousands of Navajo homes in Utah that still lack running water, but he said the tribe might consider leasing the remainder of its water to other users. The future of the dwindling Colorado River; The I

"If we're going to be sitting on paper water, as they say," Nez said, "and we're not able to use it, we might as well lease it to those that are in need."

All of these factors will likely have a role to play as the basin states renegotiate guidelines before 2026.

Utah's goals in the upcoming discussions, according to Shawcroft, will be to push for greater adaptability while working to ensure that states share water surpluses or cuts equitably as availability changes.

"I think we need to be resilient across a wide range of flows," he said, "whether they be lower ... or higher."

© 2022 The Colorado Sun. Proudly powered by Newspack by Automattic https://www.gjsentinel.com/news/western_colorado/cutting-river-usage-is-first-move-up-to-lower-basin/article_a684080e-360d-11ed-8908-b35c4f670d08.html

Cutting river usage: Is first move up to Lower Basin?

By DENNIS WEBB Dennis.Webb@gjsentinel.com Sep 19, 2022



Christopher Tomlinson/The Daily Sentinel

FILE PHOTO - The Colorado River flows toward Fruita, as seen in an aerial shot, with Colorado National Monument and McInnis Canyons National Conservation Area in the background. The Colorado feeds into Lake Powell and Lake Mead, which are fast deteriorating toward "dead pool" status. Christopher Tomlinson

Officials from up and down the Colorado River Basin on Friday talked in Grand Junction about the shared challenge of reducing water usage amid dwindling supply, with some Upper Basin representatives suggesting that the first step needs to address Lower Basin usage.

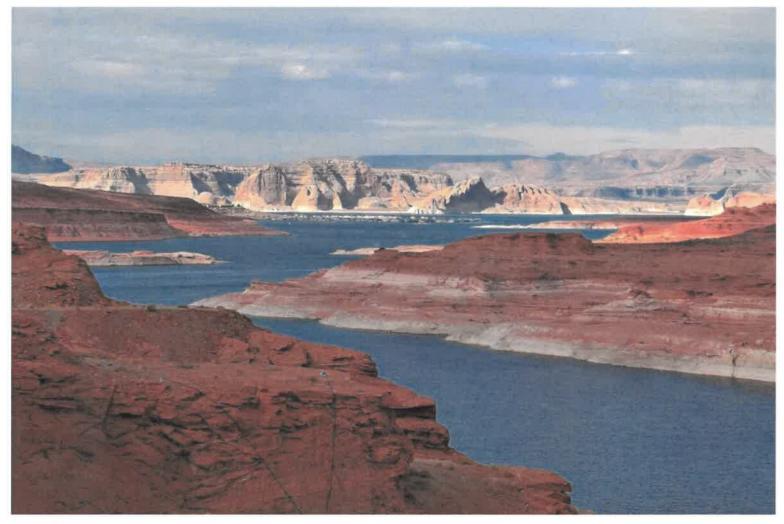
Andy Mueller, general manager of western Colorado's Colorado River District, said at the annual water seminar that his entity puts on that everyone in the basin needs to come to the table with solutions for reducing usage.

But before that can occur, he said the federal Bureau of Reclamation needs to address the fact that the way river water is currently divvied up between Upper and Lower Basin states doesn't account for evaporation and transit loss in the Lower Basin that amounts to 1.2 million acre-feet a year.

Cutting river usage: Is first move up to Lower Basin? | Western Colorado | gisentinel.com

"The key here is getting the accounting fixed and then recognizing that we all have an obligation to participate (in conservation measures) as well," Mueller said.

He warned that alternatively the river district may consider pursuing litigation to make that fix happen.



Lake Powell/Pixabay

Friday's event at Colorado Mesa University comes as the Colorado River Compact that divvies up river water between the Upper and Lower basins turns 100 years old this year. Drought and a warming climate have reduced precipitation and streamflows in the basin during the last 20 or so years that the compact has been in effect. While it allocated 7.5 million acre-feet a year to each of the basins, the watershed doesn't produce that volume of water. Water levels in Lake Powell and Lake Mead are at less than a quarter of what they can hold, which is threatening their ability to produce hydroelectric power and raising the prospect of them reaching "deadpool" and being no longer functional.

The Lower Basin has been using more water than allocated to it under the 1922 compact, and the Upper Basin, far less than its share.

In addition, Mueller said, evaporation of water in federal Upper Basin reservoirs such as Powell, Flaming Gorge and Blue Mesa gets attributed to the usage by the Upper Basin, which he said makes sense.

But evaporation and transit losses aren't calculated into Lower Basin usage, which Mueller, an attorney, said is "probably illegal in the context of the river."

https://www.gjsentinel.com/news/western_colorado/cutting-river-usage-is-first-move-up-to-lower-basin/article_a684080e-360d-11ed-8908-b35c4f670d... 2/6

Cutting river usage: Is first move up to Lower Basin? | Western Colorado | gjsentinel.com He said the Bureau of Reclamation needs to fix that, but doesn't want to because of the pain it would cause in the Lower Basin and the potential for resulting litigation.



SPECIAL TO THE SENTINEL

This photo from December 2021 shows the famous "bathtub ring" at Lake Mead due to declining water levels. Voluntary plans proposed by the upper basin states and municipal water providers won't do much to get more water into lakes Mead or Powell in the near future.

Mueller then added, "I just want to be clear, from my perspective and the river district's, there very well may be litigation if they don't fix this problem, from us, because if their threat is to come after our federal projects in the Upper Basin we will defend those projects."

Already, the Bureau of Reclamation has been making some water releases from Upper Basin federal reservoirs such as Flaming Gorge and Blue Mesa to try to shore up levels in Lake Powell.

Cutting river usage: Is first move up to Lower Basin? | Western Colorado | gjsentinel.com Earlier this year, Bureau of Reclamation Commissioner Camille Touton told the Upper and Lower Basin states to come up with 2 million to 4 million acre-feet of water through means such as conservation to address low levels in Powell and Mead, or face action by the Bureau of

Upper Basin states offered a plan without specific water volumes in it, and the Lower Basin was unable to come up with a plan by the August deadline Touton set, though Reclamation has yet to take further action on her ultimatum.

Reclamation to protect the system.

Steve Wolff, general manager of Colorado's Southwestern Water Conservation District, recalled at Friday's forum that during drought-contingency discussions in 2013, the Upper Basin put out as a prime negotiating topic the need for the Lower Basin to permanently reduce its annual use of the river to 7 million acre-feet.



HUGH CAREY/The Colorado Sun via AP

The Colorado River flows along Interstate 70 in Glenwood Canyon.

"I think that (that reduction) is a big first step for Upper Basin users to be incentivized to use less water than might be available to them. ... That's got to happen first," Wolff said.

Patrick Dent is assistant general manager of water policy at the Central Arizona Project, which already has been taking significant cuts due to the basin's water shortage.

He said he thinks accounting for evaporation loss might be a great tool for Reclamation to use in further addressing that shortage.

< - Term

Cutting river usage: Is first move up to Lower Basin? | Western Colorado | gjsentinel.com But he also said every water-using entity in the basin needs to be making a plan for how to use 20% to 30% less water.

He said he took issue with the sentiment he was hearing Friday involving a "quid quo pro" associated with what some other water users might need to do.

"If we think ... time is short and we think resources are minimal, then we need to find a way to move forward as quickly as we can and we can't necessarily stand on the side and say 'I'll go after somebody else goes,' " he said.

Bart Leeflang, program manager with the Central Utah Water Conservancy District, warned against approaching the situation in terms of winners and losers.

"I have to say in Utah we really like salads in the middle of winter, and I think that probably holds true in Colorado, and I'm guessing a lot of our salads in the winter come from Yuma," he said, referring to the Arizona community along the Colorado River.



Pixabay

"We all have legitimate, defensible stakes in the river and we really can't just sit and say, you know, I'm really happy that it's not my end of the boat that's sinking, because we're all in the same boat together," he said.

J.B. Hamby, with the Imperial Irrigation District in California, said that recently collaboration has gone out the window within the basin and finger-pointing has begun, which doesn't really help.

Cutting river usage: Is first move up to Lower Basin? | Western Colorado | gjsentinel.com

He described reductions in river use California already has made, and said the state is working to

leave millions of acre-feet in Lake Mead over the next four years to preserve the river system.

"We might all have to live with a little bit less so we can all have a river in perpetuity," he said.

Tags	Colorado Rive	Andy Mueller	Basin	Hydrography	Bureau Of Reclamation	River	District
1	Patrick Dent	Economics					

Dennis Webb

AGENDA ITEM 11 Citizen Comments

AGENDA ITEM 12 Future Meetings

FUTURE MEETINGS/EVENTS

- Wet Meadows Restoration Tour October 7, 2022 at 9 AM
- Sustaining CO Watersheds Conference October 11-13, 2022, Avon, CO
- Watershed Management Planning Mtg October 12, 2022 at 1:30 PM
- ► Gunnison Basin Roundtable Meeting October 17, 2022 at 3 PM
- ► UGRWCD Board Meeting October 24, 2022 at 5:30 PM
- Watershed Management Planning Mtg November 9, 2022 at 1:30 PM
- Veteran's Day, UGRWCD Offices Closed November 11, 2022
- Thanksgiving Holiday, UGRWCD Offices Closed, November 24-25, 2022

AGENDA ITEM 13 Summary of Action Items

AGENDA ITEM 14 Adjournment