

## Upper Gunnison River Water Conservancy District

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

# BOARD OF DIRECTORS AGENDA – REGULAR BOARD MEETING

Monday, August 29, 2022 at 5:30 p.m. 210 West Spencer Avenue, Suite B, Gunnison, CO 81230 and via Zoom video/teleconferencing:

https://us02web.zoom.us/meeting/register/tZwuduCtpzssH9KeTKgzMzZU0ikSZvjJzN1p

### **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.	<ul><li>3.</li><li>•</li><li>•</li><li>•</li></ul>	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 July 25, 2022 Meeting Minutes Consideration of Operating Expenses Consideration of Non-Operating Expenses
5:40 p.m.	4.	2023 Budget Discussion of Goals and Activities for 2023 Preliminary Estimate of Assessors' Valuations
5:45 p.m.	5.	Presentation by Chris Sturm of the Colorado Water Conservation Board, "Wildfire Ready Watershed"
6:15 p.m.	6.	BREAK
6:35 p.m.	7.	Legal and Legislative Update
6:45 p.m.	8.	Basin Water Supply Update

### 6:55 p.m. 9. General Manager and Staff/Committee Updates

- Treasurer's Report
- Executive Committee Meeting Update
- General Manager's Update Miscellaneous
- Grant Program Update
  - o Jesse Kruthaupt Presentation on dam repairs at Vouga Reservoir
- Watershed Management Planning Committee Update
  - o August 10<sup>th</sup> Meeting Summary
- Education and Outreach Committee Update
  - o August 11<sup>th</sup> Meeting Summary
- Taylor Local User's Group Update
  - o August 9<sup>th</sup> Meeting Summary
- Wet Meadows Program Update
- Scientific Endeavors Update
- STOR Update
- Colorado Water Congress Update

### 8:05 p.m. 10. Miscellaneous Matters

- Gunnison Energy Production Solar Panels
- Current Gunnison River Spreadsheet
- Newspapers and Other Water Articles
- 8:10 p.m. 11. Citizens Comments
- 8:12 p.m. 12. Future Meetings
- 8:15 p.m. 13. Summary of Meeting Action Items
- 8:20 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 Annual Meeting Minutes of the Board of Directors Monday, July 25, 2022

The Board of Directors of the Upper Gunnison River Water Conservancy District (UGRWCD) conducted its annual meeting on Monday, July 25, 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 (via Zoom), Rosemary Carroll, Rebie Hazard, Stacy McPhail, Julie Nania (via Zoom), Bill Nesbitt, Michelle Pierce (via Zoom), John Perusek, Don Sabrowski and Andy Spann.

Board members absent: Joellen Fonken

Others present:

Sonja Chavez, UGRWCD General Manager
Cheryl Cwelich, UGRWCD Watershed Program Coordinator
John McClow, UGRWCD General Counsel
Beverly Richards, UGRWCD Water Resource Specialist
Jill Steele, UGRWCD Accountant
Sue Uerling, UGRWCD Admin. Asst./Communications Support Specialist
Jim Woodcock, Esty Ranch

#### 1. Call to Order

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

### 2. Agenda Approval

President Pierce noted that Item 6 – Executive Session should be removed from the agenda and she noted that under the Wet Meadows Program Update in Item 9, an action item to partner with the BLM is being added.

Director Andy Spann moved and Director Rosemary Carroll seconded approval of the agenda as amended. The motion carried.

### 3. Consent Agenda Items

Director Bill Nesbitt moved and Director Stacy McPhail seconded approval of the consent agenda items with the minutes removed. The motion carried.

Director Rosemary Carroll wanted to clarify in the June 27, 2022 minutes under the Scientific Endeavors update (page 11 and 12) that nitrogen levels in the Slate River are low.

Treasurer Bill Nesbitt asked that on page 9 of the June 27, 2022 minutes that the reference to Waddell and Reed be struck from the minutes and that the sentence instead read "Director Fonken asked if the District was still using LPL Financial and Treasurer Nesbitt said yes."

Director Bill Nesbitt moved and Director Sara Bergstrom seconded approval of the June 27, 2022 minutes with the corrections noted above. The motion carried.

### 4. Legal and Legislative Issues

General Counsel John McClow updated the Board on the Five-Step Plan submitted by the Upper Division States to the Bureau of Reclamation in response to their request to submit plans for reduction of consumptive use of two-to-four-million-acre feet of water. (The Five Step Plan is as follows: (1) Seek amendment and reauthorization of the System Conservation Pilot Project legislation originally enacted in 2014. The amendment will provide for extension of the authorization and reporting periods to September 30, 2026, and September 30, 2027, respectively, and seek funding to support the program in the Upper Basin. Upon obtaining reauthorization, the necessary funding, and finalizing any required agreements, the Upper Division States intend to reactivate the program in the Upper Basin in 2023. (2) Commence development of a 2023 Drought Response Operations Plan (2023 Plan) in August 2022 with finalization in April 2023 consistent with the Drought Response Operations Plan Framework (Framework). A 2023 Plan must meet all the requirements of the Drought Response Operations Agreement and the Framework. These requirements include, but are not limited to, determining the effectiveness of any potential releases from upstream Initial Units to protect critical elevations at Glen Canyon Dam, and ensuring that the benefits provided to Glen Canyon Dam facilities and operations are preserved. (3) Consider an Upper Basin Demand Management program as interstate and intrastate investigations are completed. (4) Implement, in cooperation with Reclamation, the Bipartisan Infrastructure Law for Upper Basin Drought Contingency Plan funding to accelerate enhanced measurement, monitoring, and reporting infrastructure to improve water management tools across the Upper Division States. (5) Continue strict water management and administration within the available annual water supply in the Upper Division States, including implementation and expansion of intrastate water conservation programs and regulation and enforcement under the doctrine of prior appropriation.)

Counselor McClow noted that Lower Division states have not submitted any plans. The BOR's deadline is August 16<sup>th</sup>. They have not yet been willing to talk seriously about reducing their use. There was ensuing discussion about what could be done to make the lower states comply. John said that the

Secretary of Interior has the right to cut off the supply to any water user in the Lower Division states. John noted that this is not the case with the Upper Divison states. The federal government has no authority to curtail water in the Upper Basin. Reclamation could try to release additional water from CRSP reservoirs, but that would violate the Drought Response Operations Agreement, which is part of the five-step plan. The only way this could change is if the federal government determined it was necessary as an emergency action.

More questions were raised about what can be done to make the Lower Basin states comply and if the Upper Basin states are doing enough to remain in compliance with the compact. John noted that there really isn't much we can do in the Upper Basin as there is no more water to add to the system. He noted that the District could choose to be part of a conservation pilot program or perhaps a demand management program but that right now, everything is pretty vague and so much of this will depend on hydrology. He reiterated that "at this moment, our water users are protected because the Upper Basin states are in compliance with the compact." He noted that the BOR is going to have to come up with a professional, credible way of saying "this is your problem Lower Basin states and you need to fix it."

Director Don Sabrowski asked John if there was any update on the litigation of ownership of land under the Arkansas River as reported at the April 2022 UGRWCD Board Meeting. John said that the appropriate petitions have been filed for review by the Supreme Court but that the court has not yet ruled on whether it will accept the case.

### 5. Appointment of 2023 Budget Officer

Director Bill Nesbitt moved and Director Andy Spann seconded the appointment of General Manager Sonja Chavez to serve as the budget officer for fiscal year 2023. The motion carried.

### 6. Basin Water Supply Update

A Basin Water Supply update was included in the Board Packet. Water Resource Specialist Beverly Richards said Hinsdale and Saguache counties have both gotten above average rain this month and the conditions of drought improved in these counties. Most of Gunnison County has not received enough rain to change the drought conditions. Beverly noted that they are predicting the monsoonal rains will continue for the next few weeks but that they are also predicting that summer conditions will run longer than normal with hot temperatures continuing into the next couple of months. We remain in the La Niña weather pattern and this is not likely to change in the next several months. Bev noted that reservoir storage in the Gunnison and combined San Juan/Dolores basins is at record lows. The good news based on the Colorado River discussion is that the Colorado River basin storage is one of the highest in the state. Streamflows in our area continue to be well below the historical averages.

#### 7. BREAK

### 9. General Manager, Staff and Committee Updates

Treasurer's Report: Board Treasurer Bill Nesbitt reported that he had checked with Gunnison Savings and Loan and locally, we would be looking at a one percent APR for renewing CD's that have matured or will mature in the next few months. Bill said he talked to our bond dealer and that currently rates for two-year notes are paying better than long-term bonds, which doesn't make sense. Plus, as the bond market moves, these investments could be called so Bill is thinking it might be a better investment to put \$245,000 in a Synchrony Bank and American Express Bank certificate of deposit which are currently paying 3.4 and 3.3 APR respectively. By keeping them at \$245,000, even with interest earnings, we would remain under the \$250,000 FDIC insurance limit. President Pierce noted that he and General Manager Chavez do not need the Board's authorization to purchase these investments.

**Approval of Audit** – President Michelle Pierce noted that in Auditor Paul Miller's letter accompanying the audit, he presented the District with a perfect and clean opinion.

Director Bill Nesbitt moved and Director Rebie Hazard seconded the approval of the financial audit for the fiscal year ended on December 31, 2021 as presented by Auditor Paul Miller. The motion carried.

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

Gap Weather Radar Data - Sonja is concerned about the long-term acquisition of gap weather radar data across the west. She believes that directing only 20 percent of the allocated federal budget on weather radar data in the west is not acceptable as there are many gaps in weather data coverage across the west, especially for radar units that provide predictions of incoming weather and not just data on current conditions. The weather radar unit proposed for Gunnison County has been delayed due to contractor availability but she believes it will be in place by this fall. Sonja asked for the Board's approval to bring this matter to the attention of Congress in collaboration with other western states. She noted that the District should draft a memo in conjunction with the Colorado River District outlining our needs for this weather radar to submit to Congress in collaboration with other western states. President Pierce said that since there were no objections from any Board members, Sonja should continue to pursue government support for gap weather radar in the west.

Director Rosemary Carroll asked if Sonja, on behalf of the District, would be stressing funding for one particular radar over the other and she said she would be focusing on the addition of funding to the National MESONET Program. Rosemary asked if it would be possible to get the Bureau of Reclamation on board to also seek funding since they are needing this data as well. Sonja noted that as an agency of

the federal government, the BOR cannot lobby for funding but the District can emphasize the benefits to BOR forecasting.

**Colorado River District** – Sonja referred to the River District recent meeting and said there was a lot of good information shared through a number of different the presentations. She specifically noted that she got a lot out of Kevin Rein's presentation and would like the Board to hear his presentation as well.

Harmful Algal Bloom Study – A satellite image of Blue Mesa Reservoir showing the algal blooms, particularly in the Iola Basin, was presented from the July 15<sup>th</sup> data collection effort with the USGS and National Park Service (NPS). Sonja said the District has also gotten some calls from the public with concerns about algae in local rivers. Those included the east river below WWTP and Gunnison River (Mark Schumacher) reported a red powdery substance at the rock and waterline south of Almont just upstream from Camp Gunnison. Sonja offered that perhaps Katie Walton-Day from the USGS could conduct a float along the river to take some samples along the way and help identify any algae or chemicals encountered. Sonja noted that these were also issues she would bring up at the next Water Quality Control Monitoring meeting.

**Flood Plain Mapping** – Sonja reported that she is aware of changes to flood plain maps for Gunnison and Hinsdale Counties. The last mapping was done in late 1980's and with the improvements in technology, the flood plain maps have changed dramatically. Director McPhail noted that during the closings on the Lazy K housing units, the new owners were told that they would need flood plain insurance at the closing and it was very expensive. She noted that this insurance could limit access to affordable housing for some homeowners.

**Town of Crested Butte Water Source Protection Planning** - Sonja spoke with Town of Crested Butte and Paul Hempel of the Colorado Rural Water Association. ,He has not been able to submit a grant on their behalf yet due to his busy schedule but he is scheduled to conduct a field tour in August. He will submit a grant application in September so that planning can commence.

Visit by CO Department of Agriculture – General Manager Chavez and Director McPhail have been working with Bethan Howell from Commissioner Kate Greenburg's office to schedule a visit to the area with the goal of having area producers meet in person with Stephanie and Kate to discuss succession, innovation, supply chain issues, marketing issues, drought resiliency and any other concerns. Sonja encouraged Andy, Don and other producers to schedule some time to visit one-on-one with them during their visit on August 12<sup>th</sup>.

Whitewater Park Meeting – At a recent meeting with Gunnison County and Whitewater Park user groups to discuss fixing the issues with drop #2 at the Gunnison Whitewater Park, the District was surprised to learn that a third proposal was put forward that would significantly alter drop #2 in the park and reconfigure the existing drops and take out area to accommodate the new design. Watershed

Program Coordinator Cheryl Cwelich said the new proposal came with a lot of new variables and was significantly more costly. It was noted that Marlene Crosby put "a pause" on the whole project stating that Gunnison County so that she can work with the consultant on the timeline and engineering budget for the Whitewater Park. Director McPhail noted that the Watershed Planning Committee is not in favor of spending the time and money on the third (new) proposal as it was presented.

WMP Update – General Manager Chavez referenced the report provided in the packet and noted that the field season has been very busy. She commended Katie Jagt for the input she has provided during site visits and noted that Katie had concerns about Coldharbour's design plans and will provide them with an assessment of her visit and recommendations on re-engineering their plans. Director Carroll asked if this would affect their grant timeline and it was noted that Coldharbour's grant award was for planning only and that to date, the District has not entered into contracted with Coldharbour yet. Once the contract is issued, they will have a year to meet their grant obligations.

**Grant Program Update** – Water Resource Specialist Beverly Richards referred to her memo included in the packet and said that her update is that now all 2022 contracts requests are either in progress or have been completed. Bev noted that due to a change in property ownership, one application that was funded in 2021 has been canceled as the original application is not ready to move forward due to a change in ownership. A letter was written to the applicant (lessee) who was encouraged to submit an application in the future if the new owner was on board. The total of that grant award was \$9,600.

Staff recommended to the Board that these funds be used to finish the Strand Ditch project which has been in flux for over two years now. Director McPhail asked that the District's records note that the applicant, Crested Butte Mountain Bike Association (CBMBA), did not uphold their terms of the grant contract, including (1) their application was materially incorrect compared to the bridge installation/location that was actually installed; (2) there was no communication with the primary water right holder; (3) communication with the District around trying to find a reasonable solution was not positive; (4) when the District proposed solutions to the issues, even the CBMBA essentially went mute, (5) and the U.S. Forest Service had previously threatened the landowner with legal action. Stacy feels these points should be taken into consideration should CBMBA ever submit another grant application to the District in the future. After much discussion, it was determined that the Forest Service does have possession of the bridge, which essentially cost \$5,000, the amount that the District granted to CBMBA, and therefore, sending CBMBA a letter demanding they return the grant funds would serve no purpose. Sonja noted that after this incident, the grant committee made significant changes to the grant application process to ensure that any water rights holder or landowner who might be affected by a grant project are fully aware and agree with the grant proposal and that the District now has more oversight in engineering and design. Sonja said that the Forest Service is currently storing the bridge and is now saying they cannot meet their previous commitment to provide funds for materials. Sonja wants the Board's agreement for the District to move forward with the engineering and installation of the bridge

utilizing the \$9,600 in grant funds being returned. Director Carroll asked if the Board could see engineering plans for the new installation of the bridge. Sonja agreed.

Director Julie Nania noted that she is happy that the District has access to an engineer to help support District grant applications.

Director Bill Nesbitt moved and Director Rebie Hazard seconded that \$9,600 from the canceled grant award be transferred to the General Manager's discretionary funds line item to complete the Strand Ditch Bridge project in the fall of 2022. The motion carried.

**Wet Meadows Program Update -** Watershed Programs Coordinator Cheryl Cwelich reported that there has been a lot of progress made on various ground projects and she's pleased with the cooperation among the partners.

General Manager Chavez said that there have been a couple of private landowners who expressed concerns that their water rights were being affected by wet meadows projects built upstream of their property in 2020 and 2021. These concerns are being addressed and the District will be following up to coordinate redesign of the restoration structures with the BLM. Counselor John McClow said he believes that some of the structures associated with wet meadows projects can impact a water right and thinks it is important for the state to provide some clear guidelines. Sonja said that this is a statewide issue.

On other matters, Cheryl said that the BLM has requested the District participate as a cooperating agency in the preparation of the Gunnison Sage-grouse Resource Management Plan Amendment/Draft Environmental Impact Statement, which will provide input on management plans for Gunnison sage-grouse and sagebrush habitats managed by the BLM. Director Bill Nesbitt asked if there would be any hard costs involved in being a cooperating agency with the BLM and Sonja answered that it will just be staff time most likely devoted to helping provide data and information. Director Julie Nania noted that it is important that the District provide input on this land management plan and thanked the staff for their prompt and thoughtful response.

Director Andy Spann moved and Director Bill Nesbitt seconded authorizing staff to participate as a cooperating agency in providing input for the BLM Sage Grouse Resource Management Plan Update. The motion carried.

**Taylor Local User's Group Update -** The July 8<sup>th</sup> Meeting Minutes were included in the Board Packet. TLUG Chair Don Sabrowski said he was happy to report that at the July 25<sup>th</sup> meeting this morning, there was a consensus among all TLUG representatives on flow recommendations. Don said that according to the Stipulation for an "Average Year," the end-of-year storage content is 70,000 acre- feet. Don said that during the end of June and beginning of July, the forecast showed a loss of 10,000 acre-feet, which

meant flow recommendations had to be curtailed significantly to try to reach the 70,000 acre feet end of year content. Don noted that TLUG representative Ernie Cockrell agreed to not oppose an end of year storage content to 68,000 acre-feet and 83 cfs winter flow rate in order to help maintain streamflows at 230 cfs through August 21. Sonja noted that an agreement letter was signed by the Four Parties and Mr. Cockrell indicating that their approval of the reduction in end of year storage content was not precedent setting.

Chairman Sabrowski also report that Dan Brauch of the CPW said the repairs to the outlet pipe at Spring Creek Reservoir are to begin on August 3<sup>rd</sup>, and CPW is expecting all work to be completed by the end of August. CPW would like to start filling Spring Creek Reservoir as soon as possible after completion of the outlet pipe repair and they understand that they have junior water right. They will attempt to fill it from natural rainfall and snowmelt through this year and winter/spring of 2023.

The next TLUG meeting will be held Tuesday, August 9th at 11:00 AM.

**Education and Outreach** – Please see the memorandum in the Board packet.

**Scientific Endeavors:** Director Carroll said she had no report this month.

Gunnison Basin Roundtable – Director Bill Nesbitt said he attended the meeting on July 18<sup>th</sup> and that the materials for the meeting came out very late. Bill said the watershed/wildfire update given by Chris Sturm of the CWCB was very insightful. General Manager Chavez reported that Chris has been invited to address the Board on this topic at the August 29<sup>th</sup> Board meeting. Bill feels that the Gunnison Basin is much further ahead than other basins with respect to wildfire assessment.

**STOR Update:** No report this month as Director Fonken was absent.

### 10. Miscellaneous Matters

Accountant Jill Steele presented the District with a piece of watercolor photography by Gregg Morin entitled "Gunnison River Wave" as a gift from the Gunnison River Festival for serving as the title sponsor of the festival.

General Manager Sonja Chavez gave the "last call" for Board members to contact the District if they wish to attend the Colorado Water Congress Conference in Steamboat Springs August 23-25. Sonja said she is considering also taking a local ag producer as she feels they would get a lot out of the conference.

Sonja asked if Board members would be interested in having a barbecue dinner out at the I Bar Ranch at the September meeting. She said she would also like to invite elected officials, as well as town and

county planners for informal discussions around water issues like growth and development, etc. The Board was agreeable to such a dinner.

Sonja has been selected as Water Education Colorado's "Emerging Water Leader" and will be presented her award on September 8th in Denver. Counselor McClow said tickets for the President's Banquet are \$150 each.

### 11. Citizens Comments

There were no citizens comments.

### 12. Future Meetings

A list of upcoming meetings was included in the Board Packet.

### 13. Summary of Meeting Action Items

Staff will make the requested changes to the minutes.

General Manager Chavez will meet with Treasurer Nesbitt to discuss investment options for the District.

Staff will look into scheduling a barbecue dinner for the Board and area leaders at the I Bar Ranch in September

Sonja and Director McPhail will coordinate to encourage ag producers in the basin to meet one on one with Commissioner Greenburg during her August 12<sup>th</sup>.

### 14. Adjournment

Board President Michelle Pierce adjourned the regular Board meeting on July 25, 2022, at 7:48 p.m.
Respectfully Submitted,
John Perusek, Secretary
APPROVED:
Michelle Pierce, President

_	Jul 22	YTD	2022 Budget	% of Budget
Ordinary Income/Expense				
Income				
Asp Water Sales	680.15	20,449.95	22,510.00	90.85%
Cloud Seeding Income	0.00	90,750.00	92,750.00	97.84%
Interest Income	1,344.66	8,356.66	20,000.00	41.78%
Property Tax Income	227,193.28	1,502,947.49	1,609,542.00	93.38%
Reimbursed Exp Income				
GRF Reimbursed Income	55.06	-558.78		
LSC Reimbursed Income	0.00	0.00		
Misc Income	4.77	2,720.41	1,000.00	272.04%
UGRAWE Reimbursed Inc	563.00	28,005.26	33,297.00	84.11%
Reimbursed Exp Income - Other	0.00	0.00		11
Total Reimbursed Exp Income	622.83	30,166.89	34,297.00	87.96%
Taylor-CWRPDA Hydro Income	0.00	0.00		
Unspent Funds from Previous Yr	0.00	0.00	9,379.00	0.0%
Watershed Mgmt Income				
CRWCD CFP2021-15 Grant Inc	0.00	35,430.75		
CWCB 2019-2891 \$150,000	0.00	52,697.97	40,000.00	131.75%
CWCB 2020-2113 \$31,507	0.00	0.00	16,000.00	0.0%
CWCB 2022-2085 \$180,000	0.00	8,100.00		
NPS 2021-4821 Grant Inc	0.00	0.00	0.00	0.0%
TU Restore Grant Inc	0.00	8,000.00	40,000.00	20.0%
Watershed Restore Program Inc	0.00	0.00	135,500.00	0.0%
WMP CWCB PO TBD Inc	0.00	0.00	150,000.00	0.0%
Watershed Mgmt Income - Other	0.00	4,000.00	0.00	100.0%
Total Watershed Mgmt Income	0.00	108,228.72	381,500.00	28.37%
Wet Meadows Income				
BLM L17AC00255	0.00	0.00	134,666.00	0.0%
BLM L19AC00207 Silt	0.00	0.00	46,000.00	0.0%
NFWF Landscape	0.00	324,626.25		
NFWF Phase II Grant Income	0.00	0.00	107,400.00	0.0%
NRCS Grant Income	0.00	0.00		
Wet Meadows BLM Grant Inc	0.00	0.00		
WM USFS PA 18 Inc	0.00	32,941.05		
Wet Meadows Income - Other	0.00	0.00		
Total Wet Meadows Income	0.00	357,567.30	288,066.00	124.13%
WQ Monitoring Inc	0.00	35,570.00	35,570.00	100.0%
Total Income	229,840,92	2,154,037.01	2,493,614.00	86.38%
Cost of Goods Sold		_,,	_,,	
Cloud Seeding COST	98.89	69,102.50	0.00	100.0%
COST Grants	0.00	0.00		
Cost of Goods Sold	0.00	0.00		
CWCB PEPO GBRT	0.00	0.00	0.00	0.0%
NPS PO 2021-4821 COST	0.00	0.00	0.00	0.0%
UGR&D CRWCD CFP2021-15 COST	0.00	0.00	2.20	2.2,2
	<del>-</del>	<del>-</del>		

8:52 AM 08/15/22 Accrual Basis

ual Basis	Summary July 20			
	Jul 22	YTD	2022 Budget	% of Budget
Watershed COST				
2021-15 UG Restoration COST	0.00	0.00		
2022-2085 Watershed Restoration	0.00	0.00		
CWCB 2022-2085 (Restore) COST	0.00	33,165.75		
CWCB 2019-2891 COST	0.00	6,266.25	0.00	100.0%
CWCB 2020-2113 COST	0.00	5,000.00	0.00	100.0%
CWCB PO 2019 2891 COST	0.00	0.00		
CWCB WtrShed Restore Grant COST	0.00	0.00	0.00	0.0%
TU Restore Grant COST	0.00	0.00	0.00	0.0%
UGR&D CRWCD CFP202 COST	0.00	0.00		
Watershed COST - Other	0.00	0.00		
Total Watershed COST	0.00	44,432.00	0.00	100.0%
Wet Meadows COST				
BLM Coop L17AC00255 COST	689.45	6,463.80	0.00	100.0%
BLM L19AC00207 COST	14,758.34	22,422.25		
CPW HPP COST	0.00	0.00		
CPW Wetlands Grant COST	0.00	0.00		
NFWF Phase II COST	4,884.93	33,957.43	0.00	100.0%
NRCS Grant Exp COST	0.00	0.00	0.00	0.0%
USFS 22-PA-11020400-050	186.30	186.30	0,00	2.27
USFS PA-2 17-PA COST	0.00	489.03	0.00	100.0%
USFS SPA 2018 COST	0.00	10,395.46	0.00	100.0%
Wet Meadows COST - Other	0.00	0.00	0.00	700.070
Total Wet Meadows COST	20,519.02	73,914.27	0.00	100.0%
WQ Monitoring COST	28,944.00	57,886.00	0.00	100.076
Total COGS	49,561.91	245,334.77	0.00	100.0%
Gross Profit		1,908,702.24	2,493,614.00	76.54%
	100,277.01	1,700,702.24	2,473,614.00	/ 0.34/6
Expense 1 Op X				
•	75.00	10,350.20	19,000.00	54.48%
Admin.Travel & Exp.	331.96		7,500.00	128.87%
Audit and Accounting Bad Debts		9,664.84	7,300.00	120.07%
	0.00	0.00	15,000,00	00 1107
BOD Mile area	0.00	3,317.03	15,000.00	22.11%
BOD Mileage	104.39	898.53	2,200.00	40.84%
BOD Mtg Fees	1,000.00	7,760.00	13,360.00	58.08%
Bonding and Insurance	0.00	13,504.90	12,003.00	112.51%
Building Rep/Maint	1,420.00	-10,923.57	10,000.00	-109.24%
Computer Exp	0.00	1,919.98		
Computer Hardware & Repairs	0.00	0.00		
Computer Software	0.00	0.00		
Computer, Internet, Lexis	1,143.80	7,032.73		
Contribution-Endangered Fish	0.00	0.00		
Copier Expenses	309.76	3,463.26		
County Treasurers' Fees	5,660.08	42,756.63	46,237.00	92.47%
Donation RMBL Weather	0.00	0.00		
Donation Selenium Program	0.00	0.00		
Dues - Employees	0.00	0.00		
dues - Organization	0.00	0.00		
Dues, Memberships&Subscriptions	0.00	1,982.49	5,222.00	37.96%

asis	budgers	ommary July 20			
J313		Jul 22	YTD	2022 Budget	% of Budget
	Election Expenses	0.00	0.00	0.00	0.0%
	Legal Publication	46.20	6,140.68	6,000.00	102.35%
	Manager's Discretionary	0.00	946.49	3,000.00	31.55%
	Meeting Expenses	509.03	2,314.68	3,500.00	66.13%
	Office Equipment Exp	0.00	2,775.32	21,500.00	12.91%
	Office Supplies & Misc Expenses	401.90	16,155.51	21,250.00	76.03%
	Payroll Exp				
	CRA Retirement Plan	2,721.55	19,050.85	32,659.00	58.33%
	Medical Insurance	5,019.97	34,764.52	34,425.00	100.99%
	Payroll Taxes	3,520.68	24,987.88	39,092.00	63.92%
	Salaries - Admin	28,250.00	197,750.00	339,000.00	58.33%
	Salaries - Staff	17,749.28	124,666.88	164,117.00	75.96%
	Staff Development	425.00	1,026.00	9,000.00	11.4%
	Work Comp Ins	540.00	4,565.00	3,700.00	123.38%
	Payroll Exp - Other	0.00	0.00	3,700.00	120.0076
	Total Payroll Exp	58,226.48	406,811.13	621,993.00	65.4%
	•	455.40	1,330.24	1,500.00	88.68%
	Postage Public Outreach	455.40	1,330.24	1,300.00	00.00%
		0.00	207.50		
	4-H Sponsorships	0.00	307.50	10 500 00	0.4.0007
	Donation GRF	0.00	10,083.03	10,500.00	96.03%
	Internship	157.00	3,631.88	800.00	453.99%
	Mini-Grants	0.00	0.00	2,500.00	0.0%
	Public Ed./Advertising	260.00	20,417.09	28,140.00	72.56%
	Social Media	0.00	0.00		
	Website Updates	0.00	0.00		
	Youth Conservation Corps	0.00	0.00	0.00	0.0%
	Public Outreach - Other	0.00	225.00		
	Total Public Outreach	417.00	34,664.50	41,940.00	82.65%
	Publications	0.00	124.61		
	RICD Exp	0.00	0.00		
	Software Exp	138.00	1,826.19		
	Telephone	529.98	4,388.98	7,110.00	61.73%
	Utilities, Clean, Condo Dues	1,400.62	10,255.93	15,516.00	66.1%
	Vehicle Expenses - Toyota Highl	0.00	487.19	4,525.00	10.77%
	1 Op X - Other	0.00	0.00	1,020.00	10.7.70
To	tal 1 Op X	72,169.60	579,948.47	878,356.00	66.03%
	Non-Op X	72,107.00	0,7,7,10.17	0,0,000.00	00.0070
	Asp Subordination Report	0.00	4,392.50	5,000.00	87.85%
	Aspinall Contract Costs	503.50	19,349.15	18,550.00	104.31%
	Consulting/Engineering	0.00	8,132.14	15,000.00	54.21%
	Contribution to Reserve Fund	0.00	0.00	13,000.00	J4.2176
	Donation Dust on Snowpack	0.00	0.00	2 000 00	0.007
	Endanger Fish Recovery Program	0.00	0.00	3,000.00	0.0%
	Legal Fees/Projects	0.00	0.00	10 44400	100.007
	LSC Expenses	13,464.00	13,464.00	13,464.00	100.0%
	RMBL (Basinwide Planning X)	0.00	0.00	421,500.00	0.0%
	RWSI Expense	0.00	36,946.65	729,566.00	5.06%
	RWSI Grant Program	29,623.76	126,935.88		
	Spencer Ave Res Exp	0.00	0.00	10,000.00	0.0%
	Taylor Park Projects Exp	0.00	7,436.00	7,436.00	100.0%

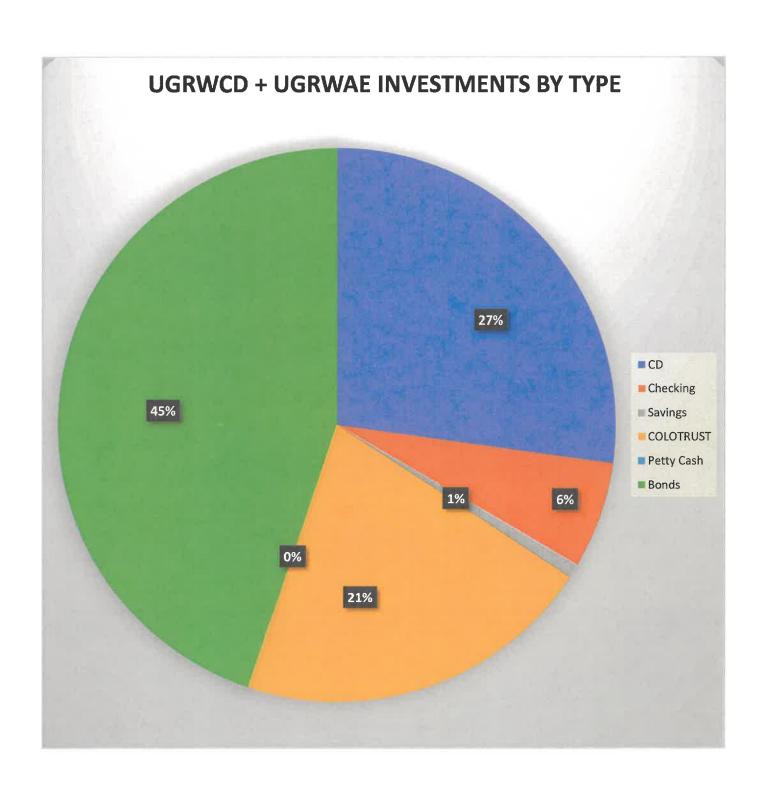
8:52 AM 08/15/22

Accrual Basis	podger 3	Jininary July 20			
Accidal basis		Jul 22	YTD	2022 Budget	% of Budget
Taylor River Modeling Exp	_	3,260.77	26,073.56		
Watershed Mgmt X		0.00	56,427.50		
Wet Meadow X		735.76	1,704.39		
WQ Monitoring		0.00	10,000.00	149,691.00	6.68%
2 Non-Op X - Other		0.00	0.00		
Total 2 Non-Op X		47,587.79	310,861.77	1,373,207.00	22.64%
Total Expense	-	119,757.39	890,810.24	2,251,563.00	39.56%
Net Ordinary Income		60,521.62	1,017,892.00	242,051.00	420.53%
Other Income/Expense					
Contingency		0.00	0.00	24,000.00	0.0%
Total Other Expense		0.00	0.00	24,000.00	0.0%
Net Other Income		0.00	0.00	-24,000.00	0.0%
Net Income		60,521.62	1,017,892.00	218,051.00	466.81%

### BANK AND BOND BALANCES - UGRWCD and UGRWAE

UGRWCD	Instrument	Balance	Cost	Interest	Maturity	Date
Account Name	Туре	7/31/2022	Basis	Rate	Date	Callable
LPL Bond 27 CUSIP 91282CDR9 Treasury Note	BOND	\$ 387,750.00	\$ 394,661.19	0.750%	12/31/2023	
LPL Bond 17 (FHLB) CUSIP 91282CDH1 Treasury Note	BOND	195,326.46	204,335.35	0.750%	11/15/2024	
LPL 19 Pac. Western CD thru LPL CUSIP 69506 YRJ O	CD	242,542.89	245,000.00	1.200%	4/17/2023	
LPL Bond 20 (FHLB) CUSIP 3130 AJLA 5	BOND	517,248.60	550,000.00	0.750%	5/19/2025	
LPL Bond 21 (Fed Farm) CUSIP 3133 EL3P7	BOND	320,845.17	345,000.00	0.530%	8/12/2025	8/12/2022
LPL 22 Merrick Bank CD thru LPL CUSIP 59013KLR5	CD	232,073.47	249,000.00	0.350%	12/30/2024	
LPL Bond 23 (FEDL) CUSIP 3130ALLD4	BOND	232,213.25	250,000.00	0.875%	3/17/2026	9/17/2021
LPL Money Market Account	M.M.	1.91		0.010%	N/A	
LPL Bond 24 CUSIP 3130AMDY5 Fedi Home Loan Bank	BOND	464,831.50	500,000.00	1.000%	5/20/2026	5/20/2022
LPL CD 25 Sallie Mae Bank CUSIP 795451 AA1	CD	232,445.22	245,000.00	0.550%	7/22/2024	3/30/2022
LPL 26 (Fed. Home Loan Banks) CUSIP 3130 APBE4	BOND	147,857.92	160,000.00	1.000%	9/30/2026	9/30/2022
LPL 28 Freddie Mac CUSIP 3134 GXQP2	BOND	197,534.00	200,000.00	3.030%	4/28/2025	7/28/2022
EPL 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		3.400%	7/29/2025	
Bank of the West Checking	CHKG	349,964.59		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	
101140 Gunnison Savings & Loan CD 5011	CD	110,802.58		1.750%	8/10/2022	
101149 Gunnison Savings & Loan CD 9413	CD	153,256.11		2.050%	10/18/2024	
10295 COLOTRUST PLUS+	COLO.	752,655.07		2.0284%	N/A	
10290 COLOTRUST PRIME	COLO.	168,556.76		1.4748%	N/A	
10200 Petty Cash	PETTY	100.00		N/A	N/A	
TOTAL UGRWCD		\$5,762,393.12				
UGRWAE		Balance		Interest	Maturity	
Account Name		7/31/2022		Rate	Date	
Bank of the West Checking	CHKG	\$ 34,317.12		N/A	N/A	
COLOTRUST PLUS+	COLO.	365,941.78		2.0284%	N/A	
TOTAL UGRWAE		\$ 400,258.90				
TOTAL UGRWCD + UGRWAE		\$6,162,652.02				

Total UGRWCD an	d UGRWAE by Bank		Total UGRW	CD & UGI	RWAE by Investment Typ
LPL Financial (Was Sigma)	\$3,715,788.96	60%	CD	27%	\$1,677,405.13
Bank of the West	489,693.25	8%	Checking	6%	384,281.71
Community Banks of Colo.	155,734.65	3%	Savings	1%	50,124.77
Gunnison Bank & Trust	250,122.86	4%	COLOTRUST	21%	1,287,153.61
Gunnison Savings & Loan	264,058.69	4%	Petty Cash	0%	100.00
COLOTRUST	1,287,153.61	21%	Bonds	45%	\$2,763,586.80
Petty Cash	100.00	0%	Total	100%	\$6,162,652.02
TOTAL ALL BANKS	\$6,162,652.02	100%			



	Name	Account	Αrr	nount Paid
	Alan Wartes Media LLC	BOW Checking	\$	180.00
		Legal Publication		26.40
	Alpine Surveying, Inc.	Consulting/Engineering		1,215.00
	Atmos Energy	Utilities, Clean, Condo Dues		39.95
	Atmos Energy	Utilities, Clean, Condo Dues		34.84
	BIO-Logic Inc	NFWF Phase II. COST		1,114.52
		BLM Coop L17AC00255 COST		186.30
		BLM L19AC00207 COST		12,884.46
		USFS 22-PA-11020400-050		186.30
	CEBT	Medical Insurance		3,218.90
	City of Gunnison Finance Dept.	Utilities, Clean, Condo Dues		75.68
	City of Gunnison Finance Dept.	Utilities, Clean, Condo Dues		143.49
	Colorado Department of Rever	SWH Payable		4,869.00
	Colorado Retirement Association	Retirement		8,989.60
	Colorado State Treasurer	SUI Payable		29.22
	Crested Butte News	Legal Publication		11.62
	Employers Council, Inc.	dues - Organization		1,500.00
	Fullmer's Ace Hardware	Office Supplies & Misc Expense:		55.64
	GL Computer Service, Inc.	Computer, Internet, Lexis		400.00
	GL Computer Service, Inc.	Computer, Internet, Lexis		3,274.98
ø	Gunnison Conservation District	RWSI Grant Program		1,350.00
	Gunnison Materials LLC	BLM Coop L17AC00255 COST		275.14
		NFWF Phase II COST		3,010.43
	Gunnison Materials LLC	BLM Coop L17AC00255 COST		228.01
	Hartman Brothers, Inc.	Cloud Seeding COST		28.99
	J&K Services Inc.	Building Rep/Maint		560.00
	Jill Steele	Medical Insurance		615.90
	John McClow	Medical Insurance		250.50
,	JW Associates, Inc.	2022-2085 Watershed Restoration		6,015.00
		Audit and Accounting		300.00
	Kim Antonucci	Audit and Accounting		262.50
	Pinnacol Assurance	Work Comp Ins		540.00
	QuickBooks Payroll Service	Payroll Taxes		1.75
•	RigNet Inc	Cloud Seeding COST		34.95
	Rocky Mountain Youth Corps	BLM L19AC00207 Silt		19,764.00
	Silver World Publishing	Public Ed./Advertising		100.00
		Legal Publication		15.40
	Spencer Avenue Business Park	Utilities, Clean, Condo Dues		550.00
	The Paper Clip	Office Supplies & Misc Expense:		80.15
	University Corp. for Atmospheric	Taylor River Modeling Exp		3,474.95
	Verizon Wireless	Telephone		272.90
	TOTAL EXPENSES FOR APPROVAL		\$	76,166.47

### **Invoice**



### Alpine Surveying, Inc. George (Skip) Hewitt PLS 23502 Professional Land Surveying Services

PO Box 93 Gunnison, CO 81230 (970) 641-2937 skiphewitt@usa.net www.alpinesurveyinginc.com

Trout Unlimited

To:

604 Elsa Court Gunnison, Co 81230. Date:

6/28/22

Job Number: Invoice number 22002C 22002C-01

Job Location: Chittendon Ditch, Gunnison County, Colorado

Job Description: Meet with Jesse and do cross sections of Quartz Creek and topo adjacent area. Provide

coordinates in Colorado State Plane Central and a .DWG, PDF and .KMZ of the surveys

**Remarks:** Thank you for the business.

### Table of Charges

Date	Code	Amount	Cost
6/21/22	LS	0.5 hours	\$80.00
6/22/22	LS GPS	3.25 hours 1.5 hours	\$520.00 \$135.00
6/27/22	LS	2 hours	\$360.00
6/28/22	LS	0.75 hours	\$120.00

Amount Due = \$1215.00

Note: Please remit amount due to the address shown above. Thank you

If you prefer to pay by credit card, please let me know and Ill forward you an invoice through PayPal to your email with a link to pay by credit card. You don't have to join PayPal to pay. There will be a 4% service charge added to this invoice.

Date Reg. 8-122 Addn. Ckd. Mgr. Appr. Amt. Appr. Bd. Appr. Date Bd. haktals

Pd. Date Ckd

Account(a) Consulting

### Code descriptions and related charges

FC = Licensed Land Surveyor & helper Field Crew

LS = Licensed Land Surveyor

GPS = 2 Trimble RTK GPS receivers - survey system OF = Office time (research, calculations, drafting, etc.)

PC = property corner set\verified

VM = Vehicle Miles

MON= Rebar & aluminum cap monument

MC = Mylar copy

CC = Color copies

BW = Black & white copy

Rate = \$225.00/hour Rate = \$160.00/hour

Rate = \$90/hr\\$500.00day Rate = \$160.00/hour

Rate = \$160.00/corner Rate = \$0.75/mile Rate = \$15.00/ monument

Rate = \$30.00/copyRate = \$20.00/copy

Rate = \$20.00/copyRate = \$10.00/copy

Office time with 2 people working on the same project will be billed at the field crew rate. Billable time includes travel from the office in Powderhorn.

Note: Due to past adulterations, unauthorized modifications and theft of proprietary data, all digital (ACAD.DWG) files that are requested will incur a minimum \$500 processing fee – to be paid in advance of transfer, unless specific arrangements are made beforehand.

# Upper Gunnison District: Wet Meadows Consultant Monthly Project Progress Report

Report Date: 7-31-22

Consultant/Contract Number: UG2021-027

Invoice Number: 4221 Invoice Amount: \$ 14,371.58

Project Performance Period: 06-26-22 thru 07-31-22 Report Prepared by: Shawn Conner, BIO-Logic, Inc. Invoice Approved C. Cwelich Contract: UG2021-027

Budget Line Item #46, Wet Meadows

5C: \$ 14,37 1.58

Apply to Grants: NFWF: \$1,114.52 BLM L19: \$12,884.46

BLM L17: \$186.30 USFS-NEW: \$186.30

0 22 PA 0400-USC

#### PROJECT ACCOMPLISHMENTS (THIS REPORTING PERIOD):

Task 1 − None

- Task 2 Plans we developed this time period for BLM Monson Gulch and WRV HCCA project and included discussions regarding planning, material staging and correspondence.
- Task 3 This time period included construction of CERRO de Orme and BLM Silt projects. These projects
  required planning and correspondence, construction oversite and data and reporting. Mapping was completed for
  Mt Island Ranch for Nathan Seward.
- Task 4 Participated in planning discussions regarding Black Sage Pass and BLM Monson

#### **Difficulties Encountered / Corrective Action / Etc.**:

Problem(s) / Changes:

None

Resolution / Corrective Action Plan & Schedule:

None

### ACTIVITY ANTICIPATED (NEXT REPORTING PERIOD): (August 2022)

- Task 1 Continue planning for CPW/USFS WRV/HCCA event
- Task 2 -None
- Task 3 -BLM construction, WRV prep
- Task 4 -data collection meetings: water rights discussions

BUDGET SUMMARY (Example only, please incorporate project specific tasks):

Task	Description	Budget	Current Expenditures	Previous Expenditures	Contract Balance	Projected Completion Date
1	Field review to identify sites	\$ 32,609	\$0	\$ 7,925.85	\$24,683.15	
2	Develop Plans and Designs	\$ 53,120	\$ 279.45	\$ 17,360.44	\$ 35,480.11	
3	Supervise work crews, volunteers, and contractors	\$ 59,357	\$ 13,812.68	\$ 16,491.82	\$ 29,052.50	
4	Overall planning meetings	\$ 8,718	\$ 279.45	\$4,873.28	\$ 3565.27	
	Totals	153,804	\$ 14,371.58	\$ 46,651.39	\$ 92781.03	

Requested Budget Amendments & Rationale: None

Requested Contract Amendment & Rationale: None

Shawn Conner (BIO-Logic, Inc), Signature & Date:

07-31-22

Wet Meadows Supervising Coordinator, Signature of Approval & Date:

08/08/2022

# **Invoice**



125 Colorado Ave., Suite B Montrose, CO 81401 (970) 240-4374

### **UGRWCD**

Attn: Sonja Chavez

210 West Spencer, Suite B Gunnison, CO 81230

Date	Invoice #
8/5/2022	4221

			Terms	Due Date
			Net 30	9/4/2022
Quantity	Descript	tion	Rate	Amount
	Task 4 Participate in Team Meetings			
	Subtotal:	\$279.45		
3	Hours, Shawn Conner, Senior Scientist Subtotal Labor		90.00	270.00 270.00
	Overhead (3.5% of staff labor)		3.50%	9.45
hank you for yo	our business.		Total	\$14,371.5
			Payments/Credits	\$0.0
			Total Due	\$14,371.5

### Upper Gunnison River Water Conservancy District Grant Reimbursement Request and Warranty Template

Approved for payment - BAR. 7/27/22 Please charge to Budget Line Item 46 - Regional Water Supply

Improvement Program - Grant Program

Date: July 25, 2022

Payment.

Applicant/Payee Signature & Date:

Upper Gunnison Project Manager Signature & Date:

Project Name: Native Plant Xeriscaping Project

UGRWCD Contract Number: UG2022-012	2022
Reimbursement Request Amount: \$ 1,350.00	Date Rec. 7 772 Addn. Ckd. Mgr. Appr. SRC Amt. Appr. 81,350
Match Provided: \$2,701.54	Pd. Date Bd. Initiate Pd. Date Cide Account(s)
Project Performance Period: June 1, 2022 - May 31, 2023	2022.
Applicant/Payee Name: Gunnison ConservationCheck Paya	able To: Gunnison Conservation District
Applicant Address: 216 North Colorado Street; Gunnison,	Colorado 81230
Applicant Phone: 970-707-3047 Applicant E	Email: gunnisoncd2006@gmail.com
PROJECT DELIVERABLES:	÷.
<ul> <li>Photo and Expense Documentation</li> <li>A signed warranty statement by Applicant that all work completed in a good and workmanlike manner.</li> </ul>	done on the Funded Work has been
Difficulties Encountered / Corrective Action:	
Problem(s) / Changes: No major problems or changes	occurred
Resolution / Corrective Action Plan & Schedule: Not app	plicable

By submittal of this reimbursement request and supporting documentation of expenditures, Applicant

Deliverables have been completed, all amounts due and payable for the Funded Work have been paid or, alternatively will be paid with the funds advanced by the District in response to this Request for

attests to the Upper Gunnison River Water Conservancy District that all items under Project

7/27/22

### **Gunnison Materials LLC**

### 23625 Uncompangre Road Montrose, CO 81403

### Invoice

Date	Invoice #
7/26/2022	22-652

Bill To

Upper Gunnison River Water Cons Dist 210 West Spencer, Suite B Gunnison CO 81230 Approved by C. Cwelich on 07/29/22

Budget Linet Item #46 - Wet Meadows

Grants: BLM 1.17-\$228.01

Project / PO	Terms
Monson	Net 30

			ivionson	1401 50
Quantity	Description	U/M	Price Each	Amount
6.29 6.29	Tracking Pad Rock - McCabe Lane Fuel Surcharge on Aggregate Production	ton	35.00 1.25	220.15 7.86
	Date Rec. Aden. Ckd. Mgr. Appr. Amt. Appr. Bd. Appr. Date Bd. Initials Pd. Date Ckd Account(s) wet readow  BUT			

**Sales Tax (0.0%)** 

\$0.00

**Total** 

\$228.01

Phone # 970-641-4042

E-mail zane@rockymountainaggregate.com

### **Gunnison Materials LLC**

### 23625 Uncompangre Road Montrose, CO 81403

### **Invoice**

Date	Invoice #
7/26/2022	22-651

Bill To

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

Approved by C. Cwelich on 07/29/22

Budget Linet Item #46 - Wet Meadows

Grants: BLM 1.17-\$275.14 NEWF Phase II - \$3:010.43

> Project / PO Terms Upper Willow Net 30

	Description	U/M	Price Each	Amount
7.59	Tracking Pad Rock - McCabe Lane	ton	35.00	265.65
7.59	Fuel Surcharge on Aggregate Production	ton	1.25	9.49
58.74	Rip Rap McCabe Lane Fuel Surcharge on Aggregate Production	ton	50.00 1.25	2,937.00° 73.43
	Data Rec. Addn. Chd. Mgr. Appr. Amt. Appr. Amt. Appr. Bd. Inhtials Pd. Date Chd. Account(s) Leg			

**Total** 

\$3,285.57

Phone #

970-641-4042

E-mail

zane@rockymountainaggregate.com



### Hartman Brothers, Inc.

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



Sold To:						Sh	ipped	d To:						
210	ER GUNNISON WEST SPEN	CER AV	E., SU											
GUNN	NISON, CO,	81230	)											
,				CYLIN	מס ספר	ד א ייואי	TNIZO	NT C'E						
CUSTOMER No.		CUSTOMER P	.O. No.	CILIIN	DEK KI		10D	TCE	l in	NOICE DA	re		INVOICE No.	PAGE
M05447					0.	7 / 0 1	07/31		у-у 2022	n-м 2 07	<sub>В-Б</sub> 31	25402		1
DESCRII	PTION	DATE	DEL.NOTE #	INVOICE No.	C:	LINDER	MOVEMEN	т	CONTRACT	CHARGE	RA	_	376483 AMOUNT	T T
NITROGEN 6	50CF L days otal	07 31			3 3	O	O	3 3	0	93 93	0.	.300	27.90	
Mgr. A Bd. A Pd. D Accou	unt(s)_Cloud	Adeln. Amt. Appr Bd. halt Class	Chd. A			TYPE: S - DEMUE L - MONTH D - DAILD	END		su	B-TO	ſAL		27. 00	
NET	30 DAYS					N - FREE H - HIGHE	ST						27.90	)
VALUE OF CYL	INDER INVENTOR	RY ON HA	ND						SA	LES !	rax		1.09	)
THIS INVOICE IS PA	YABLE IN FILL HPON	RECEIPT							L	'OTAL			28.99	)
CYLINDERS ARE RENT OF THE SELLER.														



Invoice Number: 6

Date: Aug 1, 2022

Project name: Upper Gunnison River Watershed/Wildfire Assessment

Contract Number: NA

Project Manager: Brad Piehl

JWA Project Number: 283

Period:

Apr 1, 2022 to Jul 31, 2022

Submitted to: Beverly Richards

Upper Gunnison River Water Conservancy District

210 West Spencer, Suite B Gunnison, CO 81230

Past Due:

\$0.00

**Invoice Total:** 

\$6,015.00

Total Due:

\$6,015.00

Approved by:

Submit to: JW Associates, Inc.

P.O. Box 3759

Breckenridge, CO 80424-3759

Date Rec. Addn. Clid. Mgr. Appr. 5RC Amt. Appr. 6.01
Bd. Appr. Date Bd. hittists

Pd. Date C

This invoice	Past invoices	Total	Budget	Remain. Budget
\$6,015.00	\$25,312.50	\$31,327.50	\$38,000.00	\$6,672.50



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

202207\_472

Date

31 July, 2022

Account

C201008

Remittance should be mailed to: RigNet, Inc. P. O. BOX 941629 Houston, TX 77094 Phone: +1 281 674 0683 Email: ar@rig.net

**Airtime Period** 

1 Jul - 31 Jul 2022

Summary

Total Airtime and Fees this Period

USD

34.95

**Total Amount This Invoice** 

USD

34.95

Terms: Ne

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

Mgr. Appr. Sec. Amt A

Bri Appr. Date
Pd. Date

Account(s)

**Summary per Product** 

Product

**Charge Type** 

Amount (USD)

**OrbCommIDP** 

Subscription Fee

33.00

### Charges per Device / SIM Card

Device / SIM	Description		Service	Airtime	Total
01181782SKY6FEB	Monthly fee for New IDP 25K Plan	USD	33.00		33.00
01181782SKY6FEB	Monthly fee for Backoffice Subscription Fee - IP SCADA	USD	1.95		1.95
	Total Airtime and Fees this Period	USD	34.95	0.00	34.95
Total Invoice Amount (se	e front page for specification)		U	SD	34.95



Rocky Mountain Youth Corps 991 Captain Jack Drive Steamboat Springs, CO 80487

# **Invoice**

Date	Invoice #
8/12/2022	22-UGRWCD-1

Invoice Approved C. Cwelich Contract: UG2022-005

Budget Line Item #46, Wet Meadows

Apply to Grant: BLM L419

			P.O. No.		
			22-UGRW	WCD-1	
Item	Description		Price each	Amount	
fee for service	2 Trail Crew Weeks Project Dates: 07/11/22-07/22/22 Project Description: The crew worked on meadow restoration by building Zeedyk structures in the Upper Gunnison River Water Conservancy District  FINAL INVOICE	2	9,882.00	19,764.00	
Thank you!		Tota	l	\$19,764.00	
		Payr	nents/Credits	\$0.00	
Phone # 970-879-2135		Bal	ance Due	\$19,764.00	





# 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

Customer # C64161 Invoice # IN222053 Date: 08/03/2022

UPPER GUNNISON RIVER WATER CONSERVANCY DISTRICT 210 WEST SPENCER AVENUE

TO SUITE B

**GUNNISON** 

CO 81230

Credit Card Payment can be accepted at https://www.fin.ucar.edu/epayment

DESCRIPTION		AMO	TNUC
Salaries Benefits Material and supplies Computing Service Center			1,317.30 717.93 93.97 134.23
Overhead  Task Order Agreement No. 20220238  Expenses 7/1/2022-7/31/2022			1,211.52
Date Rec. 3-1-V Addn. Clid.  Mgr. Appr. SRC Amt. Appr. 33,47.  Bd. Appr. Date Bd. Initials  Pd. Date Clif  Account(s) 1 ay(w/ River Hold.	N. 95		
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	3,474.95

	•	

Detach and return this portion with your payment

TID# 84-0412668

Invoice # IN222053

Date: 08/03/2022

Amount Enclosed:



# **AGENDA ITEM 4**

2023 Budget

# **AGENDA ITEM 5**

Presentation by Chris Sturm, CWCB

# AGENDA ITEM 6 BREAK

# **AGENDA ITEM 7**

**Legal and Legislative Matters** 

# **AGENDA ITEM 8**

**Basin Water Supply** 

#### **MEMORANDUM**

**TO**: UGRWCD Board Members

**FROM**: Beverly Richards, Water Resource Specialist

**DATE**: August 19, 2022

**SUBJECT**: Basin Water Supply Information

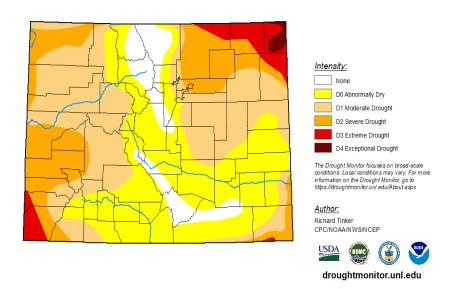
The information supplied as part of this memorandum is a monthly feature and includes information about drought conditions in the basin, streamflow, reservoir storage, and reservoir operations.

#### **Drought Conditions:**

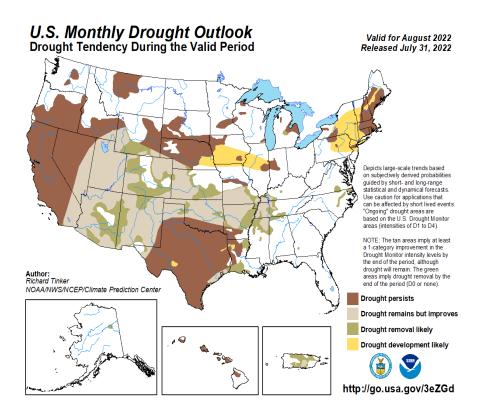
According to the *Drought Monitor* at *drought.gov* as of August 16, 2022, drought conditions have improved considerably throughout the state and is likely due to monsoon rains received through July and the first half of August. A total of 76% of the state is now experiencing no drought to Moderate (D1) conditions which is an increase from the 68% in the July report. As shown in the map below, 24% of the state remains in Severe (D2) to Exceptional (D4) drought conditions. This is an improvement from last month's report which showed that 32% of the state was experiencing severe to exceptional drought conditions. These changes to the drought monitor are likely due to considerable precipitation the state has seen since the middle June.

U.S. Drought Monitor
Colorado

August 16, 2022 (Released Thursday, Aug. 18, 2022) Valid 8 a.m. EDT



substantial portion of the state including parts of Gunnison County, and all of Hinsdale and Saguache Counties by the end of August.

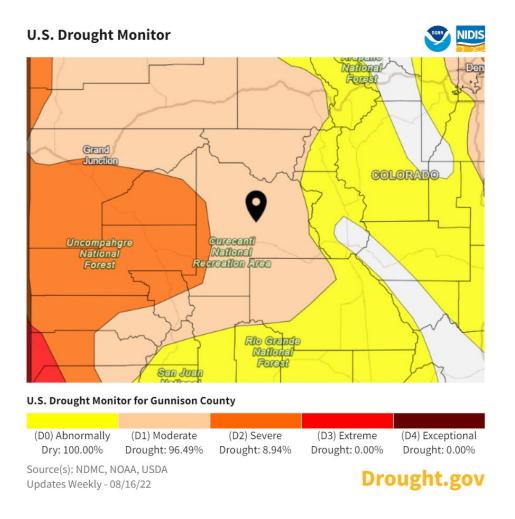


#### **Drought Conditions – Gunnison County**

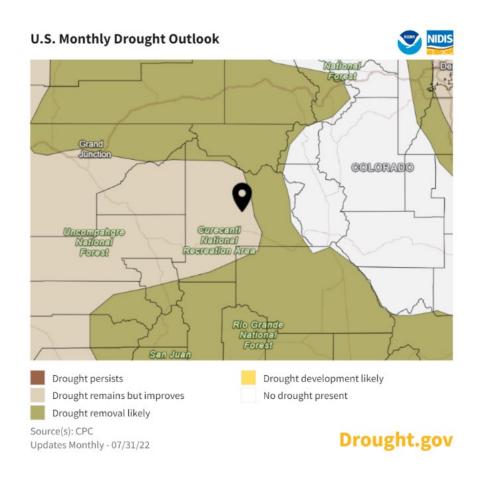
Drought conditions in Gunnison County have improved since the July report. As of August 16, 2022, 91% of the county is experiencing Abnormally Dry (D0) or Moderate (D1) conditions and only 9% is experiencing Severe (D2) drought conditions, which is a substantial decrease in the Severe category, as this was only 66% in July. The difference since last month is shown in the table, and a current drought monitor map is provided below.

Drought Conditions – Gunnison County percentage (August 16 vs July 5)

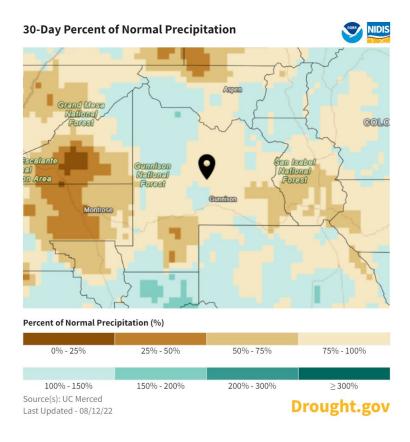
Date	None	D0	D1	D2	D3	D4
August 16, 2022	0	3.51	87.55	8.94	0	0
July 5, 2022	0	3.77	35.66	60.57	0	0
Difference	0	26	+51.89	-51.63	0	0



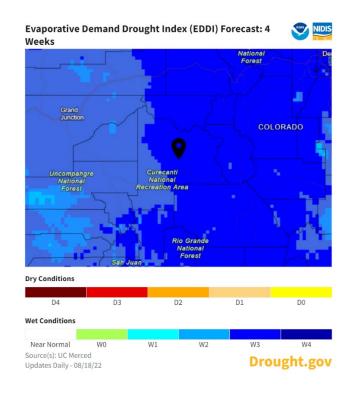
Also included is the August outlook for drought conditions in Gunnison County, see map below. This map shows that in almost half of the county, drought removal is likely by the end of the month.



The *Drought.gov* website indicates that this has been the 41<sup>st</sup> wettest July on record for the county and the area is .35 inches above normal for the 128-year historical record. Below is the 30-day precipitation map dated August 12, 2022, where precipitation amounts ranged from 25-150% of normal in the county. This data does not include severe rainstorms that dropped nearly 1" of rain in the rain gage at the District offices since August 12th.



Also included is the Evaporative Demand Drought Index map below. This map shows that the entire county is now in either W3 to W4 wet conditions which is a substantial decrease in evaporative demand. Periods of high evporative demand are connected to droughts and increased fire danger. As evaporation decreases, soil moisture increases and fire danger decreases.

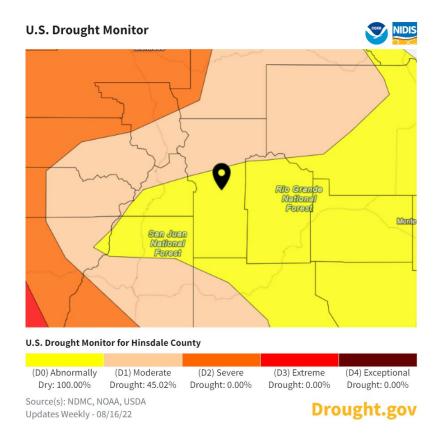


#### **Drought Conditions – Hinsdale County**

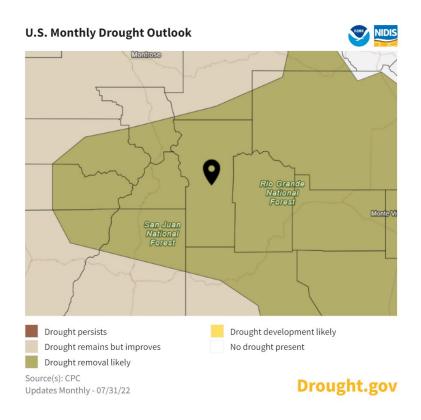
Drought conditions in Hinsdale County have improved significantly since the July report. As of August 16, 2022, 100% of the county is experiencing Abnormally Dry (D0) or Moderate (D1) conditions. On July 5<sup>th</sup> nearly the entire county (98%) was experiencing Severe (D2) drought conditions. These conditions did improve by July 12<sup>th</sup> where 100% of the county was in moderate conditions. The difference from July 5<sup>th</sup> to August 16<sup>th</sup>, is shown in the table, and a current drought monitor map is provided below.

Drought Conditions – Hinsdale County percentage (August 16 vs July 5)

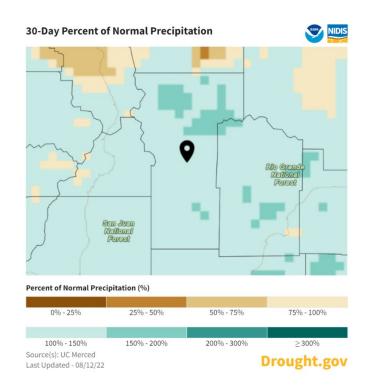
Date	None	D0	D1	D2	D3	D4
August 16, 2022	0	54.98	45.02	0	0	0
July 5, 2022	0	0	1.71	98.29	0	0
Difference	0	+54.98	+43.31	-98.29	0	0



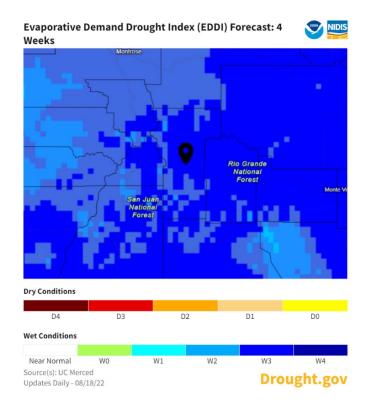
Also included is the August outlook for drought conditions in Hinsdale County, see map below. This map indicates that in the entire county, drought removal is likely by the end of the month.



The change in conditions is due entirely to monsoon precipitation that has continued since the last report. The *Drought.gov* website indicates that this has been the 9th wettest July on record for the county and the area is 2.04 inches above normal for the 128-year historical record. Below is the 30-day precipitation map dated August 12, 2022, where precipitation amounts ranged from 100-200% of normal in the county.



Also included is the Evaporative Demand Drought Index map below. This map shows that the entire county is now in either W3 to W4 wet conditions which is a substantial decrease in evaporative demand.

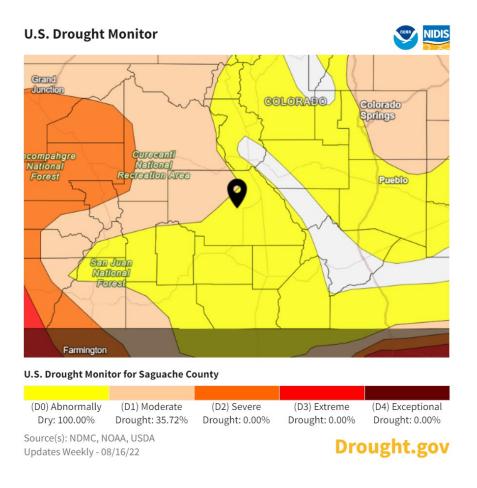


#### **Drought Conditions – Saguache County**

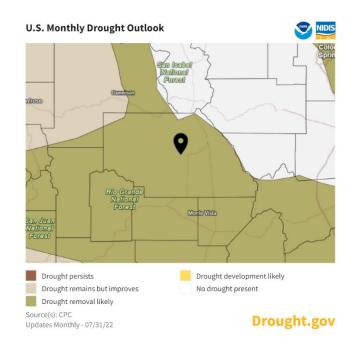
Drought conditions in Saguache County have also improved since the July report. As of August 16, 100% of the county is now in Abnormally Dry and Moderate (D1) drought conditions. In July, 50% of the county was in Severe (D2). The difference in the 30-day conditions is reflected in the table provided below. The difference from July 5<sup>th</sup> is shown in the table, and a current drought monitor map is provided below.

Drought Conditions – Saguache County percentage (August 16 vs July 5)

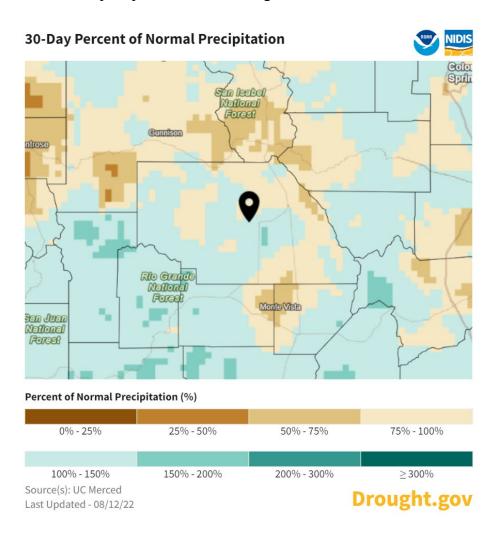
Date	None	D0	D1	D2	D3	D4
August 16, 2022	0	64.28	35.72	0	0	0
July 5, 2022	0	1.29	47.96	50.75	0	0
Difference	0	+62.99	-12.24	-50.75	0	0



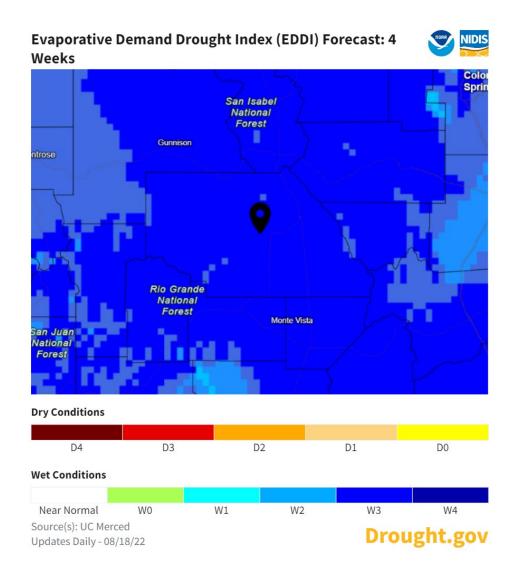
Below you will find the August outlook for drought conditions in Saguache County, see map below. This map indicates that in almost the entire county, drought removal is likely by the end of the month.



The change in conditions is due entirely to monsoon precipitation that has continued since the last report. The *Drought.gov* website indicates that this has been the 21<sup>st</sup> wettest July on record for the county and the area is .82 inches above normal for the 128-year historical record. Below is the 30-day precipitation map dated August 12, 2022, where precipitation amounts ranged from 50-200% of normal in the county.



The Evaporative Demand Drought Index map for Saguache County is below. This map shows that the entire county is now in either W3 to W4 wet conditions which is a substantial decrease in evaporative demand.



#### Streamflow

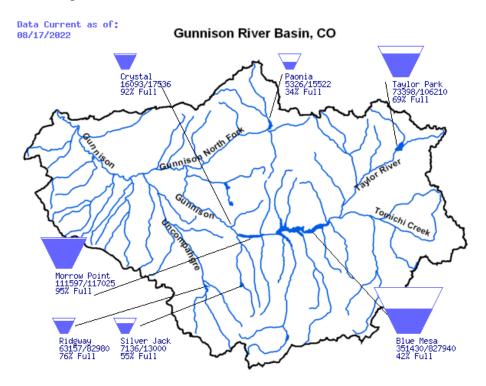
Recent precipitation has helped somewhat with streamflow in the Upper Gunnison basin, as shown in the table provided below. The area with the greatest increase is Tomichi Creek and Gunnison River below Gunnison at County Road 32 (Tomichi Creek flows into the Gunnison River just upstream of this gage). At the time of this report, the Gunnison River gauge at CR 32 was flowing at 764 cfs, which is nearly a 200 cfs increase.

Even though streamflows are improved from last month's report, many of the gages still indicate that flows are below the historical average. In addition, the increased flows have not necessarily improved reservoir storage conditions. Blue Mesa continues to decline from its max fill of 48% to 42% at the time of this report preparation.

Station Name	July 14 (cfs)	August 18 (cfs)	Historical Average August 18 (cfs)
Gunnison River near Gunnison	544	566	670
Gunnison River at Gunnison Whitewater Park	589	538	546
Tomichi Creek at Sargent's	47	37	37
Tomichi Creek at Gunnison	74	239	147
Taylor River at Taylor Park	96	76	72
Taylor River blw Taylor Park	248	231	345
Taylor River at Almont	357	308	404
Slate River abv Baxter Gulch	65	28	30
East River blw Cement Creek	193	96	156
East River at Almont	259	151	203
Lake Fork blw Lake San Cristobal	71	77	58
Henson Creek at Lake City	78	79	69
Lake Fork at Gateview	166	186	182

### **Reservoir Storage**

As of August 17, reservoir storage in the entire Gunnison Basin is at 79% of full. The reservoirs in the Upper Gunnison Basin - Taylor and Blue Mesa - are at 69% and 42%, respectively. The tea-cup diagram for the Gunnison Basin is provided below.



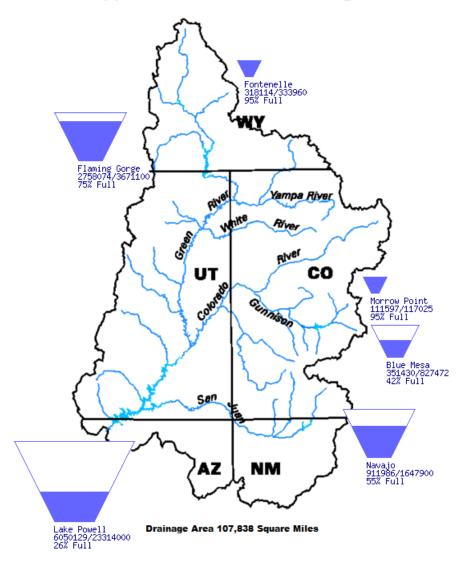
Reservoir storage for the Upper Colorado River Basin is currently at 64% of full, which is a slight decrease from last month, and is broken down below:

- Flaming Gorge 75% full
- Fontenelle 95% full
- Morrow Point 95% full
- Blue Mesa 42% full
- Navajo 55% full
- Lake Powell 26% full

These amounts are reflected in the tea-cup diagram provided below.

Data Current as of: 08/17/2022

## Upper Colorado River Drainage Basin



#### **Aspinall Unit Operations**

The following update was provided by the *Bureau of Reclamation* (BOR)and is dated August 11, 2022.

The unregulated inflow volume in April-July was 430,000 acre-feet which is 68% of average, the historical average for that timeframe is approximately 722,000 acre-feet. The actual maximum fill for the Blue Mesa was 391,000 acre-feet which is 48% of average. Currently, Blue Mesa is at 351,430 acre-feet which is 42% full as shown in the teacup diagram provide above. The end of year content (12/31) is forecasted to be 282,000 acre-feet which is 34% full.

As per the update, releases from Crystal Dam are approximately 1,550 cfs. In a subsequent update received August 17, these releases will be reduced to 1,450 cfs as rainfall has helped put river flows above the baseflow target of 900 cfs on the lower Gunnison River. River flows are expected to continue at or above the baseflow target for the foreseeable future. Gunnison Tunnel diversions are approximately 1,050 cfs. Flows in the Gunnison River in the Black Canyon are being maintained at 550 cfs but may decrease to 450 cfs due to the release change on August 18. Flows in the Gunnison River at the Whitewater gage near Grand Junction, are approximately 1,100 cfs.

#### **Taylor Park Reservoir Operations:**

In the Board packet, you will find the August 1, Taylor Park Reservoir operations using the August 1 forecast from the Colorado Basin River Forecast Center (CBRFC). The Taylor Local Users Group (TLUG) decided agreed to reduce releases to 230 cfs and to try to maintain that level through September 5th for the benefit of commercial rafting, floating, and fishing and agricultural users. This would result in an end-of-year storage content of 68,500 AF in Taylor Reservoir. After September 5<sup>th</sup>, Reclamation would begin stepping-down releases by 25 cfs every 48 hours until reaching the calculated winter flow target of 83 cfs. The TLUG decided that they would meet again after August 15<sup>th</sup>, if the forecast showed a decline in hydrology.

On August 17, the BOR indicated that due to recent precipitation, the CBRFC was predicting a slight improvement in the forecasted inflow volume to Taylor Park Reservoir so releases are anticipated to remain at the current level of 230 cfs through the Labor Day weekend.

The next TLUG meeting is scheduled for September 8, 2022, at 10:00 a.m.

#### **Lake San Cristobal Update:**

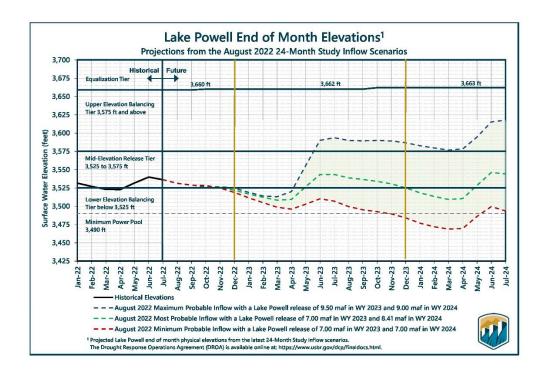
The August 18 storage elevation for Lake San Cristobal was 8,995.18 feet which is 97% full and is down slightly from the July reading of 8,995.25. At the time of this report, reservoir releases were 77 cfs and the flows at the Lake Fork at Gateview gage are 186 cfs.

#### **Lake Powell Update:**

The August 16, 2022, update for Glen Canyon Dam Operations is taken from the BOR website.

The August 2022 24-Month Study projects the January 1, 2023, Lake Powell elevation to be less than 3,525 feet. Consistent with Section 6.D.1 of the Interim Guidelines, Lake Powell's operations in water year

2023 will be governed by the Lower Elevation Balancing Tier (LEBT) with an initial projected release volume of 7.00 million acre-feet (maf), this is shown in the graph below.



Because the 2022 operations were designed to protect critical elevations at Lake Powell, Reclamation will implement Lower Elevation Balancing Tier Operations in a way that continues to protect critical elevations or preserves the benefits of the 2022 operations to protect Lake Powell, in water year 2023. Specifically, The August 24-Monthy Study modeled operations in WY 2023 as follows:

- The Glen Canyon Dam annual release has initially been set to 7.00 maf, and in April 2023 Reclamation will evaluate hydrologic conditions to determine if balancing releases may be appropriate under the conditions established in the 2007 Interim Guidelines;
- Balancing releases will be limited (with a minimum of 7.00 maf) to protect Lake Powell from declining below elevation 3,525 feet at the end of December 2023;
- Balancing releases will take into account operational neutrality of the 0.480 maf that was retained in Lake Powell under the May 2022 action. Any Lake Powell balancing release volume will be calculated as if the 0.480 maf had been delivered to Lake Mead in WY 2022; and
- The modeling approach for WY 2023 will apply to WY 2024.

Reclamation will continue to carefully monitor hydrologic and operational conditions and assess the need for additional responsive actions and/or changes to operations. Reclamation will continue to consult with the Basin States, Basin Tribes, the Republic of Mexico and other partners on Colorado River operations to consider and determine whether additional measures should be taken to further enhance the preservation of

these benefits, as well as recovery protocols, including those of future protective measures for both Lakes Powell and Mead.

#### **Lake Powell Current Operations**

Based on the current forecast of 5.96 maf unregulated inflow for water year 2022, the <u>August 24-Month</u> <u>Study</u> projects Lake Powell elevation will end water year 2022 near 3,528.64 feet with approximately 5.76 maf in storage which is 25% percent of capacity.

#### **Lake Powell Future Operations**

The August 3, 2022, CBRFC forecast for WY 2023 unregulated inflow to Lake Powell projects the most probable (median) unregulated inflow volume will be 8.30 million maf which is 86% of average. The range includes a minimum probable of 4.70 maf which is 49% of average, to a maximum probable of 15.70 maf or 163% of average. There is a 10% chance that inflows could be higher than the current maximum probable forecast as well as a 10% percent chance that inflows could be lower than the minimum probable forecast. This would mean that Lake Powell elevation will end water year 2023 near 3,526.65 feet elevation with approximately 6.24 maf in storage which is 27% of capacity. Projections of minimum and maximum elevation are 3,495.03 feet and 3,589.27 feet, respectively.

Based upon this data, the anticipated annual release volume from Lake Powell during WY 2023 will be 7.00 maf under the LEBT. This will balance the contents between Powell and Mead with annual release volumes from Glen Canyon Dam between 7.00 and 9.50 maf as determined under Section 6.D.1 and 7.D of the Interim Guidelines.

Keep on Rain Dancing!

## **AGENDA ITEM 9**

**General Manager and Committee Reports** 

# **AGENDA ITEM 9**

**Treasurer's Report** 

## **AGENDA ITEM 9**

**Executive Committee Update** 

## **MEMORANDUM**

**TO**: UGRWCD Board of Directors

**FROM**: Sonja Chavez, General Manager

**DATE**: August 21, 2022

**SUBJECT**: Treasurer, General Manager, and Committee Updates



#### I. Treasurer's Report (Director Nesbitt)

#### **II. Executive Committee Meeting Update (Director Pierce)**

Director Pierce will provide a verbal update to the Board of Directors from the Executive Committee meeting held on July 27<sup>th</sup>.

#### III. General Manager's Report

#### A. Miscellaneous Updates

#### A.1 Upper Gunnison Basin Cloud Seeding Program

The Upper Gunnison District contracts with North American Weather Consultants (NAWC) to carry out the Upper Gunnison Watershed Cloud Seeding Program. A permit is required to modify weather in Colorado. All cloud seeding activities are regulated and permitted by the Colorado Department of Natural Resources under the authority of the Colorado Water Conservation Board (CWCB). The Colorado Water Conservation Board administers the state's cloud seeding program, providing annual funding and issuing permits. The Upper Gunnison's cloud seeding permit is up for renewal this year. Permitting is a responsibility of the contractor (NAWC).

Staff is cooperating with the CWCB and NAWC in the permit renewal process. The District, CWCB, and NAWC are currently evaluating an adjustment to our actual cloudseeding boundary of influence which would result in our being granted a 5 year permit.

In 2021 the District established a manually operated cloud seeding site near Black Mesa as the site evaluation showed strong performance potential and covered a needed and highly desired area within our cloudseeding program boundary. Manually operated sites require a local individual or group to operate the seeding machine, and unfortunately it just didn't work very well.

The District, CWCB and NAWC still believe this location could be very beneficial in terms of water production potential. We would like to construct a *remote* seeding generator and the existing landowner is still willing to work with us to have an established site on their property. Preliminary estimates for the remote seeder infrastructure are estimated to be approximately \$50,000. We will be discussing with CWCB and NAWC various options for outside funding to help support infrastructure costs.

In addition, once the gap weather radar site is functional and if we are successful in getting the National Mesonet Program to purchase and process the data coming from the radar site via the National Weather Service, we could tie our basin's remote generators (Irwin and Black Mesa) to the gap radar site. This would increase our seeding success and we would no longer have to depend on unreliable and incomplete information coming from the Grand Junction Weather Service. We could also decommission the remote icing meter near the summit of Mt. Crested Butte which receives annual funding support in the amount of \$10,000 from the CWCB and reallocate it to the annual O&M of the Black Mesa Remote Seeding Generator.

In order to get the site up and running before snow flies this fall/winter of 2022, it may be necessary for the board to approve additional expenditure under our cloud seeding program. Ms. Richards is serving as our staff lead on Cloud Seeding. She and the General Manager hope to be able to update the Board with additional information at our August 29<sup>th</sup> meeting.

#### **RECOMMENDED ACTION:**

Support the concept of adding a *remote* cloud seeding generator at Black Mesa and direct staff to continue to explore funding support with our program partners for infrastructure, and annual O&M and bring a funding proposal back to the Board as soon as possible.

#### A.2. Gap Weather Radar Update

The General Manager continues to work with Western States Water Partnership (WSWP) and others to work with our congressional delegation to secure additional funding for the National MesoNet Program for the specific purpose of purchasing gap weather radar data in the Colorado River Basin. No updates at this time.

In last month's update, staff informed the Board that Advanced Radar Company (ARC) was having difficulty with the Montrose contractor who had provided a bid to ARC and which ARC had accepted. Staff was able to connect ARC with a local contractor and at last check the contractor had submitted a bid. Staff is trying to connect with ARC to see if that bid has been accepted and if there is an associated construction timeline. We hope to provide an additional update at the August 29<sup>th</sup> Board Meeting.

#### A.3 Gunnison County Board of County Commissioner (BOCC) Update

General Counsel McClow and Water Resource Specialist Richards gave a water update to the Gunnison BOCC. There was good conversation, lots of questions that staff were able to address, and good press coverage.

#### A.4. Harmful Algal Bloom Grant Request to the Community Funding Partnership (CFP)

Staff requested an update from Amy Moyer (CRWCD CFP Director) on the HAB's grant request. Ms. Moyer indicated that they had been very busy processing Accelerator Grants, had staff on vacation and were a bit delayed. She hopes to be able to give District a better update in a couple of weeks.

#### A.5. Senator Michael Bennet Public Listening Session: 2023 Farm Bill

General Manager Chavez attended an August 18 Public Listening Session in Hotchkiss, Colorado, arranged by staff of Senator Michael Bennet. The purpose of the session was to obtain public input on proposals for changes in the 2023 Farm Bill. The following input was given on behalf of UGRWCD constituents:

- Need for Farm Bill to address needs of small scale off-channel irrigation storage facilities (e.g., less than 2,000 AF)
- Need to address staffing issues in the Montrose/Delta regional NRCS office. They just lost their only engineer.
- Allow the program to pay for installation of utilities that provide for access to threephase electricity to operate pumping system for on-farm irrigation efficiency measures.
- Encourage farmers and ranchers to utilize solar by creating mechanisms through which they can sell excess power generated back to local co-ops or electric associations.
- Include gap weather radar as associated drought response and water related infrastructure under the Watershed Protection and Flood Prevention Act (PL-566).
- Make it easier to use Farm Bill Program for improving rangeland forage through programs like Wet Meadow Restoration on federal lands.
- Get rid of practice payments that do not keep up with inflation or the multi-year delays caused by the lack of local NRCS personnel to plan and design projects. Instead, allow applicants to rely on Lump Sum or Engineer'ss Estimates of Probable Cost to determine cost share for projects.

#### Other input from basin ranchers attending listening session:

- Provide programs and better support for beginning farmers and ranchers. Existing
  programs are bias toward produce farmers versus ranchers involved in livestock
  production.
- Create good provisions for addressing the need for vegetation management in our forests and watersheds including grazing practices.

#### **B.** Grant Program Update & Presentation

- **B.1.** At the request of the District Grant Committee, Watershed Science Design (WSD, Katie Jagt) and Round River Design (RRD, Michael Blazewicz) conducted a preliminary geofluvial assessment and review of the 2022 *Coldharbour Stream & Wetland Restoration Project* UGRWCD Grant Proposal. Overall, the findings re-affirm staff and Grant Committee concerns about the proposal which are:
  - 1) The proposal attempts to address the symptoms but not the causes of degradation in the stream reach;
  - 2) The proposal and proposed design have significant constructability issues;
  - 3) There are inconsistent stated goals and confusion in the use of terminology used in river management and how those relate to project goals;
  - 4) Goals are not reflected well in the conceptual design presented to WSD; and
  - 5) The applicant needs to focus on starting with an alternatives analysis and conceptual design rather than a robust/full hydrologic analysis for their project and the appropriate technical expert should have skills in geo-fluvial morphology and design.

There are significant issues with the stretch of river adjacent to the Highway 50. This is an excellent reach for evaluation of restoring the river into its natural channel (back to the area near the abandoned railroad grade) and doing floodplain restoration, but it's critical for the applicant to understand the underlying causes of stream degradation they are seeing in order to implement projects that support overall restoration of stream function and so that they don't make an existing problem worse. This project will also require significant involvement from CDOT and the U.S. Army Corps of Engineers.

The \$15,000 budget identified in the proposal or pre-feasibility engineering should be sufficient for this first phase of proposed work.

Ms. Richards has sent a letter to the applicant, who has been provided with a copy of the report, indicating that a contract for the \$7,500 District Grant Award is contingent upon hiring the appropriate technical expert to conduct an alternatives analysis and preliminary geo-fluvial design report.

## B.2. Brief Presentation by Jesse Kruthaupt (Trout Unlimited): 2020 Vouga Reservoir Dam Restoration & Rehabilitation Project – R&K Staheli Farms

#### C. Watershed Management Planning (WMP) Update

Below is a quick summary of activities to date. Please also see attached August 10, 2022, meeting minutes.

C.1.Public Presentations: State of the Colorado River Basin & Upper Gunnison Basin Water Supply Assessment. UGRWCD General Counsel, General Manager and

Consultants are working on preparing a public presentation to be given at our September Board meeting which we hope to conduct at the I Bar Ranch (TBD).

#### C.2. Watershed & Wildfire Risk Assessment

Staff is reviewing the final report from JW Associates. We hope to make the report public by the end of September or beginning of October.

#### C.3. Geo-Fluvial Assessments

Katie Jagt (Watershed Science Design or WSD) has preliminary maps and ideas for implementation projects associated with her geo-fluvial assessments. Staff hopes to organize a WMP meeting with Katie in September in order to provide feedback and input.

#### C.4. Agricultural Assessments

Agricultural assessments continue this field season. We anticipate completing approximately fifteen to twenty assessments this season. Our consultant also continues to assist with development of preliminary engineering and cost estimation on high priority projects as a service to our constituents. In all, we have experienced over a 95% success rate in assessed projects moving to construction. In addition, interim and final engineering inspections on more complicated projects are of great value to the District and applicants.

Staff is considering a potential Watershed Protection and Flood Prevention Act (Public Law 83-566) grant application to support agricultural irrigation delivery system work in the Ohio Creek basin and other watershed activities (e.g., practices or measures which conserve and develop the soil, water, woodland, wildlife, energy, and recreation resources and enhanced water quality of lands within a watershed). The Declaration Policy is as follows: Erosion, floodwater, and sediment damages in the watersheds of the rivers and streams of the United States, causing loss of life and damage to property, constitute a menace to the national welfare; and it is the sense of Congress that the Federal Government should cooperate with States and their political subdivisions, soil or water conservation districts, flood prevention or control districts, and other local public agencies for the purpose of preventing such damages, of furthering the conservation, development, utilization, and disposal of water, and the conservation and utilization of land and thereby of preserving, protecting, and improving the Nation's land and water resources and the quality of the environment.

There may be funding available from the Colorado Agricultural Water Alliance (CAWA) for hiring a grant writer. Staff will update the Board if and when any formal decision is made.

#### D. Education & Outreach Committee Update

A verbal update will be given by Chairwoman Bergstrom. The August 11<sup>th</sup> meeting summary has also been included in the meeting packet.

#### E. Taylor Local Users Group (Director Sabrowski)

A verbal update will be given by Director Sabrowski (TLUG Chair). August 9<sup>th</sup> meeting minutes attached. The *August 17<sup>th</sup> TLUG Note to File* identifies continuation of the 230 cfs release from Taylor through September 5<sup>th</sup> as planned due to improving hydrology and provided that inflow projections hold and reservoir storage stays above the 68,200 AF, Four Parties approved, end of year October 31, 2022 storage content.

- F. Wet Meadows Update (Cheryl Cwelich, Watershed Program Coordinator) See Wet Meadows Program Memorandum.
- **G.** Scientific Endeavors Update (Director Carroll)
- **H. STOR Committee Update (Director Fonken)**
- I. 2022 Colorado Water Congress Update from Staff and Directors

Directors and staff will give the Board a summary of take-aways from the 2022 Colorado Water Congress (CWC) Summer Convention.

In addition, the UGRWCD was just recently asked to give joint testimony to the State of Colorado Water Resource and Agricultural Review Committee at CWC regarding our ten years of experience as a water conservancy district with the Wet Meadows and Riparian Restoration Resiliency Building Program. General Manager Chavez will be testifying along with Abby Burke who is the Western Rivers Regional Manager for Audubon of the Rockies.

#### <u>MEMORANDUM</u>

TO: Board of Directors

FROM: Upper Gunnison Basin Water Quality Monitoring Program

DATE: August 16, 2022

SUBJECT: Summary of Water Quality Monitoring Program Meeting

The Upper Gunnison Basin Water Quality & Surface Monitoring Program (UGWQMP) stakeholder group met on August 16, 2022 to review outcomes from the program for 2021-2022. Introductions were made and the following people were in attendance.

UGRWCD: Sonja Chavez, Beverly Richards, Cheryl Cwelich, Jill Steele, and Sue Uerling; Ashley Bembenek (CCWC), Julie Nania (HCCA), Christian Robertson (CBSMD, Via Zoom), Mike Rogers (City of Gunnison, via Zoom); and USGS: Trish Solberg, Bryan Moore, and Steve Anders.

#### **Review of Meeting Agenda**

There were no changes to the agenda as presented.

#### Brief History of Upper Gunnison Water Quality Monitoring Program

This program initially began as a NAWQA USGS stream gaging activity in the Upper Gunnison basin and evolved into a basin-wide partnership with multiple local entities contributing financially to the program. The program has been in place for over twenty years and is considered a trendsetter and model for cooperation among community stakeholders and has been adopted by other entities across the state.

#### **Items for Discussion:**

Agenda topics included USGS program updates, local water quality updates, NGWOS updates, budget for 2023, and additional monitoring needs. As a result of these discussions the following information was provided.

#### **USGS Program Update**

USGS provided an overview of the Upper Gunnison JFA and NGWOS programs. Bryan Moore, Supervisory Hydrologic Technician, provided information about the surface water side of data collection. In his presentation he provided information about the 11 existing coop stream gages that are part of the long-term trend monitoring program in the Upper Gunnison basin. This included information about the two newest gages on Willow Creek and Texas Creek above Taylor Park Reservoir installed under the NGWOS Program.

Bryan then described USGS operation and maintenance work to maintain accurate measurement of streamflow as well as verification of all data throughout the year. Sometimes instability occurs in the monitoring devices which can necessitate verification with from additional measurements. When anomalies occur, USGS may have to make additional visits in order to evaluate equipment and make sensor corrections. Any data collected by these gages is published on USGS data collection platforms including the USGS Water Watch and USGS Water Dashboard.

Trish Solberg, Supervisory Hydrologic Technician, provided an overview of the Upper Gunnison basin gage sites within the District boundaries. As stated above, there are a total of eleven coop stream gages. These include:

- o Taylor River at Taylor Park
- Slate River above Baxter Gulch
- East River below Cement Creek
- Ohio Creek above mouth
- o Tomichi Creek at Sargents
- Coal Creek above McCormick Ditch
- o Gunnison River at Gunnison Whitewater Park
- o Gunnison River at County Road 32
- Ohio Creek near Baldwin
- Lake Fork below Lake San Cristobal
- Henson Creek at Lake City
- Five of these are funded by outside groups (Streamflow Gaging)
  - o Taylor River at Taylor Park BOR and CRWCD
  - o Taylor River at Almont USGS
  - o East River at Almont US Department of Energy
  - o Gunnison River near Gunnison USGS
  - Elk Creek at Coal Creek EPA
- Two of these are funded through NGWOS (Streamflow Gaging)
  - o Texas Creek
  - o Willow Creek
- In addition to stream gaging, all of the following sites include discrete water quality field sampling:
  - o Taylor River at Taylor Park
  - Slate River above Baxter Gulch
  - East River below Cement Creek
  - Ohio Creek above mouth
  - o Tomichi Creek at Gunnison
  - o Coal Creek above McCormick Ditch
  - o Gunnison River at County Road 32 (National Water Quality Site)
  - o Tomichi Creek below Cochetopa Creek

- Cebolla Creek at Powderhorn
- East River at Almont
- o Gunnison River near Gunnison

Other data collection activities include Taylor Park Reservoir – elevation and storage; Taylor River below Taylor Park Reservoir – precipitation; Lake Fork at Gateview – precipitation; Cochetopa Creek below Rock Creek – precipitation; and Taylor River at Almont – air temperature.

They have completed 3 out of 6 sampling events for March, April, and May and will complete the other 3 during the coming months. Maximum water temperature was recorded at the Ohio Creek near Gunnison gage where temperatures reached 72.5 degrees. This was the highest recorded temperature at that site in twenty years. Also, pH levels at Tomichi Creek at Gunnison were measured at 9.0 standard units (su) which is not unusual for this time of year.

Trish said that the water quality data summary report has been updated through WY2019. They are currently looking for an alternative display option for this information and once that is complete, subsequent year information will be included.

#### **NGWOS Updates**

The following information was provided or discussed:

- Isotope sampling studies have been added to all existing monitoring sites and is being done by Carl Bern of USGS. There was discussion about possibly having him provide a presentation to local research scientists and UGRWCD Board and general public.
- HAB sampling continues on Blue Mesa Reservoir with NPS.
- Discussion about possibly re-establishing monitoring sites and doing a synoptic study on Cebolla Creek at Powderhorn to isolate sources and trends in phosphorus loading.
- USGS added specific conductance and water temperature to Taylor River at Taylor Park, East River at Almont, and Cimarron River.

#### Local Water Quality Updates and Additional Monitoring Needs/Requests

The US Forest Service has preliminary plans for future prescribed burns in the Taylor Park Basin (put on hold due to recent concerns over potential wildfire). Sonja asked if there was an opportunity to collect water quality data before and after prescribed burns which can have temporary effects on water quality and quantity. Steve Anders said it may be good to speak with Suzanne Pashke about possibly including this type of data analysis in the NGWOS work. Willow Creek is one of those areas and was identified as a high wildfire risk/high priority area for management. Steve indicated it might be a good idea to examine load above and below the burn areas.

- Ashley Bembenek provided an update on Coal Creek temporary modifications. During the Regulation 35 hearing in June 2022, the Water Quality Control Commissions (WQCC) deleted the chronic copper and zinc temporary modifications applied to Coal Creek.
- During the May 2021 Regulation 93 rulemaking, the Slate Rive between Coal Creek and the East River were removed from the 303(d) list for temperature. This has important positive implications for the Town of Crested Butte's wastewater treatment facility and is thanks to our program's inclusion of temperature gages on these streams.
- Ashley recommended flow and water-quality monitoring on Marshall Creek and Tomichi Creek downstream of Marshall Creek for uranium.
- Ashley asked if it is possible to add dissolved organic carbon sampling in the Upper Gunnison basin since DOC and other parameters will be used to calculate water quality standards for metals (aluminum and copper).
   We currently have DOC sampled four times per year at Coal Creel at McCormick and Taylor River at Taylor Park. She suggested perhaps prioritize streams with elevated aluminum and copper concentrations that are used as municipal water supply or that are tributary to municipal water supplies.
- Conner Newman (NGWOS Team) is monitoring groundwater baseflow in the Upper Colorado River basin including the Upper Gunnison.
- Sonja Chavez will provide information to the group about gages that were installed by Dave Gochis in his work in the Taylor River basin.
- Sonja informed the group that the District has been hearing a lot from the public that they are concerned with algal growth happening in our rivers. Trish was not seeing anything alarming in the data but suggested that perhaps she take a closer look at trends.

#### **Action Items**

- Staff will follow up with Carl Bern about isotopic data and invite him to present data to WQMP, DOE, LBNL, etc., and possibly the Upper Gunnison board / general public.
- USGS will evaluate monitoring recommendations along with draft cost estimates and advise the group after discussing with Sonja
- USGS suggested that if we could take samples of the algae that perhaps Katie could analyze.
- Sonja will get information about additional stream gages installed by Dave Gochis (UCAR).
- Staff will provide a copy of the vegetation management plan developed by the Forest Service to determine if there is an opportunity for incorporating water quality/quantity monitoring.
- Staff discuss monitoring of uranium on Marshall Creek and Tomichi Creek with the County and then communicate with Homestake Mine to determine if they are interested in cooperating.

- Staff will contact Forest Service to see if there is anything they can do to speed up permitting of additional SNOTEL sites in the basin. Garrett with NAWC to determine best locations for additional SNOTEL sites
- USGS will follow-up on sampling on Cebolla Creek. There are three inactive gage sites that could be reactivated: Cebolla near Lake City, Cebolla near Powderhorn, and Spring Creek at Cebolla.

### Adjournment

The meeting was adjourned at 12:30 p.m.

## **MINUTES**

TO: Watershed Management Planning Committee

**FROM:** Beverly Richards (Water Resource Specialist); Sonja Chavez (General Manager)

**DATE:** August 10, 2022

**SUBJECT:** Watershed Management Planning Committee Meeting

A meeting of the committee was held on August 10, 2022, at 1:30 p.m.

Stacy McPhail, Jesse Kruthaupt (TU), Nancy Johnston-Bramlett (CTU), Chris Sturm (CWCB), Mike Tarantino (CSFS), and UGRWCD Staff: Sonja Chavez, Beverly Richards, Cheryl Cwelich, Jill Steele, and Sue Uerling were in attendance.

Agenda topics included an in-depth discussion of draft assessments provided by JW Associates, update on improvements at the Gunnison White Water Park, Drought Contingency Planning funding (Reclamation), and CWCB WMP purchase order status.

As a result of these discussions the following action and discussion items were identified.

#### **Action and Discussion Items:**

- Cheryl Cwelich will continue to provide updates on the Gunnison White Water Park improvements.
- Sonja Chavez will continue to work on the development of the third purchase order from CWCB for the watershed management/stream management planning process. This could include implementation of projects for pre-fire and post-fire mitigation of wildfire hazards identified in assessment.
- Sonja Chavez will speak with David Gochis about the possibility of conducting hydrology and hydraulic modeling in the Taylor River in order to begin process of identifying high priority areas for wildfire mitigation.
- Sonja Chavez will talk to USGS the possibility of NGWOS partnership in identified zones of concern in the Taylor River basin and Wet Meadow Base Flow Study.
- UGRWCD & WMP Committee input into draft assessment documents will be provided to JW Associates for inclusion in reports.
- Upon completion of geo-morphological assessments, staff and committee members will review and update list of values and concerns to ensure we are meeting assessment goals.
- Sonja Chavez will coordinate engineering services with NRCS where consistent with UGRWCD goals and mission to continue to move projects forward within our District boundary (Note: Montrose/Delta NRCS Office lost their only remaining engineer).
- Staff will continue to provide updates to committee regarding status of ongoing assessment in the basin.

#### **Next Meeting**

Watershed Management Planning Committee – September 14, 2022 – 1:30 p.m.

#### Adjournment

The meeting was adjourned at 2:24 p.m.

## **MINUTES**

**TO:** UGRWCD Education & Outreach Committee

FROM: Beverly Richards (Water Resource Specialist); Sue Uerling (Administrative

Assistant / Communications Support Specialist)

**DATE:** August 11, 2022

**SUBJECT:** Education and Outreach Committee Meeting

A meeting of the Education and Outreach Committee was held on August 11, 2022, at 1:00 p.m.

Stacy McPhail, Sara Bergstrom, Bill Nesbitt, Sonja Chavez, Beverly Richards, Cheryl Cwelich, and Sue Uerling were in attendance. Rosemary Carroll attended by remote video conference.

Agenda topics included review of 2022 education and outreach action plan, and discussion of the proposed 2023 action plan. As a result of these discussions the following action and discussion items were identified:

#### **Action and Discussion Items**

- Staff will create a calendar of events consistent with the action plan
- Staff will create a 1-to-2-page fact sheet about water in the basin. This can be distributed in real estate closing packets to inform public
- Sonja Chavez will speak with John McClow about preparing a Water Law 101 Program presentation and his willingness to give as part of our community educational programs.
- Stacy will speak to Eric McPhail about UGRWCD potential participation in rural landowner days.
- Sonja Chavez will provide the link to the wet meadows study done in New Mexico.

Bill Nesbitt moved and Stacy McPhail seconded the approval of the 2023 action plan as presented. The amount was \$59,930 for the 2023 budget. The motion carried.

**Next Meeting: TBD** 

**Adjournment**: The meeting was adjourned at 2:31 p.m.

Following the meeting, staff received cost estimates from: (a) Molly Childerston for the 8<sup>th</sup> Grade Taylor Challenge water sampling supplies; (b) Renee Brekke for the middle school science programming to create a pollinator garden next to the middle school pond; (c) Krystal Brown for the Gunnison High School science Program (creation of a weather station); and (d) Krystal Brown for students to attend the 6th Global UN Mountain Partnership Conference September 26-29, 2022 in Aspen. The total amount of these requests is \$3,411 of which \$2,110 will be reallocated from line items in the 2022 action plan that were not or will not be used, leaving an unallocated fund balance of \$2,120.

## **MINUTES**

## **Taylor Local Users Group**

## August 9, 2022 - Draft v.08-10-22 for TLUG Review

#### **TLUG Attendees:**

**TLUG Representatives Present:** 

Don Sabrowski (Chair)

Roark Kiklevich (Wade Fishing)

Mark Schumacher (Whitewater Boating)

Ernie Cockrell (Taylor Placer; by Zoom)

Ryan Birdsey (Flatwater Recreation; by Zoom)

Andy Spann (Agricultural: by Zoom)

#### **TLUG Representatives Absent:**

Pete Dunda (Property Owners)

#### Others in person:

Beverly Richards- UGRWCD

Sue Uerling – UGRWCD

Keith Hegarty - Wilder on the Taylor Homeowner

**Dustin Brown – Scenic River Tours** 

Bill Gallenbeck – Taylor Dam Outlet Operations

Dave Gochis - UCAR

#### By Zoom:

Erik Knight - BOR

John Bocchino - Riffle and Rise LLC

Jill Steele - UGRWCD

Steve Pope - UVWUA

#### I. Introductions & Approval of Minutes

**Minutes:** Chairman Sabrowski asked if there were any changes to the minutes. There were no corrections identified. **Mark Schumacher moved, and Roark Kiklevich seconded a motion to approve the minutes as presented. The motion passed.** 

**II. UCAR WRF Hydro Model Forecast:** Dave Gochis provided an update from the University of Colorado Atmospheric Research (UCAR). For the April-July timeframe the WRF-Hydro model forecasts the total runoff to be approximately 72,000 acre-feet. They did notice that the Taylor River tributaries above the reservoir accounted for 61 percent of the total runoff, however, this was less than some years.

The summer runoff was less than normal, and this is likely due to soil moisture content which affected the runoff yield. In the timeframe for April-September the model is showing 83,900 acre-

feet of runoff which is about 12,000 acre-feet more than the Colorado River Basin Forecast Center, but he did state that the model is over-estimating in terms of summer runoff.

III. CBRFC Water Supply Update and USBR Model Forecast: Erik Knight presented the August 1 CBRFC forecast. This forecast showed that the runoff for the timeframe of April – July was 72,000 acrefeet which is 77% of average. The max fill for the reservoir was 80,923 acre-feet or an elevation of 9316.6. The end-of-year content is forecasted to be 69,300 acre-feet and this involves flows of 230 cfs the first two weeks in August, a decrease on August 16<sup>th</sup> to 200 cfs, and then a ramping down beginning after Labor Day to 100 cfs by the middle of September. The winter flow beginning in October will be 84 cfs if the end-of-year content is above 69,000 acre-feet, or 83 cfs if the content is above 68,000 acre-feet. Erik also stated that there is 80-85% chance that the reservoir will fill next year if regular conditions exist.

Question: Ernie Cockrell asked how the ramping down from 200 to 100 cfs will occur. Erik said it is scheduled to begin on September 7<sup>th</sup> and will be reduced in increments of 25 cfs per day to be completed by September 11<sup>th</sup>.

#### **IV. Flow Recommendation Discussion Summary:**

Mark Schumacher said he would like to see the releases remain at 230 cfs at least through Labor Day and he asked Erik to calculate. Andy Spann agreed that leaving the releases at 230 cfs would benefit the boaters, outfitters, and agricultural users. Based on the calculations for the release being reduced to 200 cfs beginning September 7<sup>th</sup>, there would be just above 68,000 acre-feet at the end of the year.

Mark suggested that the reduction in flows should begin on September 5<sup>th</sup> rather than the 7<sup>th</sup>. The calculation, based on this recommendation, puts the end of year content at 68,500 cfs. As with the original plan, the ramping down to 100 cfs will be completed in a 4-day timeframe. Andy Spann, Ernie Cockrell, Roark Kiklevich, and Ryan Birdsey all agreed with this recommendation.

Per group consensus, Erik Knight will provide the August 15<sup>th</sup> forecast as soon as it is available. The group would like Sonja to provide this information to them via email in order to decide if an additional meeting is necessary, or if changes need to be made.

#### V. Miscellaneous Updates and Next Meeting:

No miscellaneous updates were provided.

**Next meeting set for September 8 at 10:00 am** (hybrid meeting).

Meeting adjourned at 11:28 AM.

Attachments: August 1, 2022, Taylor River Forecast and Operations

## NOTE TO FILE

## Taylor Local Users Group

August 17, 2022

Consistent with recommendations from the August 9<sup>th</sup>, 2022, meeting, UGRWCD General Manager, Sonja Chavez was asked to provide the TLUG with the August 15<sup>th</sup> forecast from Erik Knight as soon as it became available so that the group could decide if an additional meeting was necessary to adjust the current 230 cfs Taylor Reservoir release.

Following is the communication received from Erik Knight on August 17<sup>th</sup>, 2022:

From: Knight, Erik L <EKnight@usbr.gov>
Sent: Wednesday, August 17, 2022 11:57 AM
To: Sonja Chavez <schavez@ugrwcd.org>
Subject: Re: Taylor Park August update

Hi Sonja

The forecast for August inflows into Taylor Park Reservoir is looking pretty good.

Using the 10 day flow forecast from CBRFC indicates the August inflow volume would end up around 8,000 AF. This is higher than the monthly forecast for 7,000 AF. Sometimes these 2 forecast products do not jive with each other, but CBRFC has said that the daily flow forecasts should be better than the volumetric forecasts for short-term hydrology. If the forecasted rains fail we may end up closer to the 7,000 AF number for August.

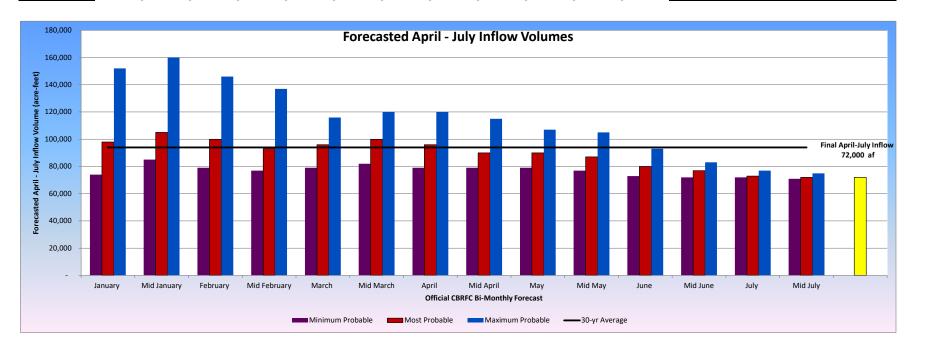
Using the 8,000 AF assumption for August inflows puts the reservoir content at 68,700 AF on Oct 31, while maintaining a 230 cfs release until Sept 5th. So that's the buffer we are working with.

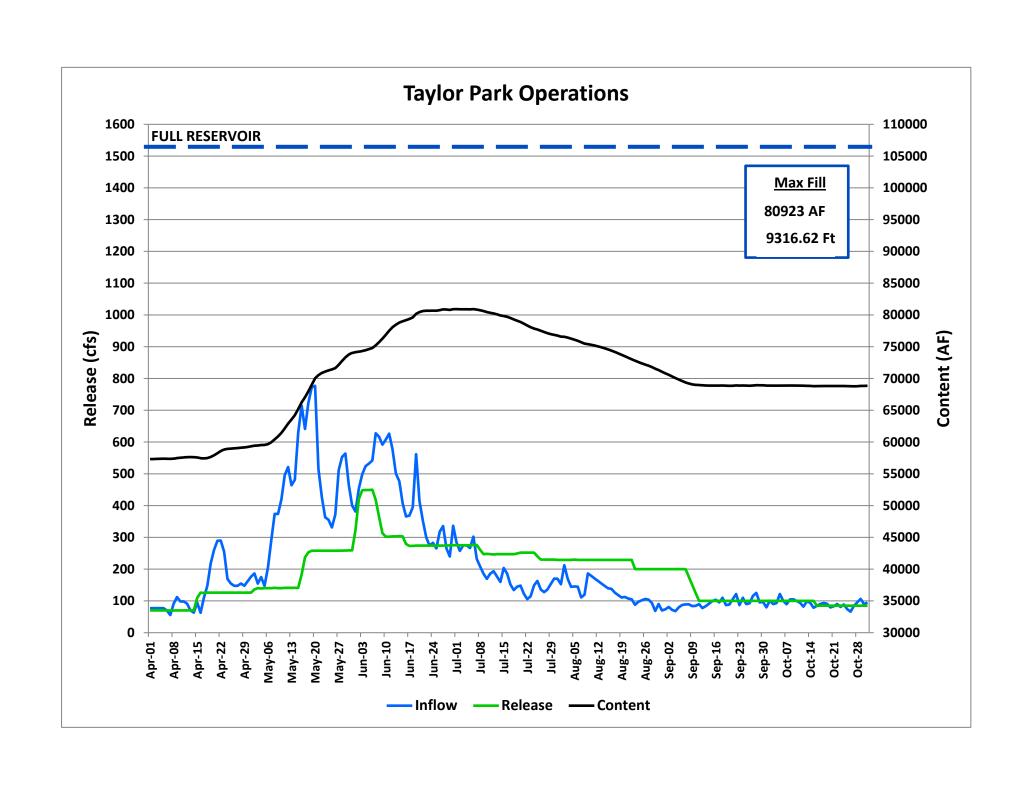
I'm out of town until next Tuesday, but I think we are good for now.



Based on the above information, Sonja emailed the TLUG on the August 17<sup>th</sup> to let them know that based upon Erik's email and TLUG direction given on August 9<sup>th</sup> meeting, it would not be necessary to meet again in August as hydrology and the inflow forecast had actually improved. The TLUG could continue the 230 cfs release through September 5<sup>th</sup> as planned. Sonja indicated she would put a reminder in her calendar to touch base with Erik when he returns to see if he can give another 10-day inflow forecast. If hydrology should tank and the TLUG need to meet sooner, she will contact representatives immediately to schedule a Zoom meeting. Otherwise, the **next scheduled meeting is September 8<sup>th</sup> at 10:00 a.m. (hybrid).** 

		V	VY2022 CBRFC	C - Taylor Par	k Reservoir M	lost, Max and	Min Inflow I	Forecasts (acr	e-feet)				<u>.</u> I						
CBRFC Forecast		Monthly Inflow Volume Forecast (Acre-Feet)																	ı
Issued	October	November	December	January	February	March	April	May	June	July	August	September							ı
October	4,500	4,400	3,600																ı
Mid October	4,600	4,000	3,600											Ap	ril - July	/ Forecas	its		ı
November	4,900	3,900	3,500	3,200															l
Mid November	4,900	4,100	3,600	3,300															l
December	4,900	4,300	3,600	3,400	2,800														ı
Mid December	4,900	4,300	3,600	3,400	2,800									% of Avg	Min	% of Avg	Max	% of Avg	AVO
January	4,900	4,300	4,500	3,400	3,100	3,500							98,000	104%	74,000	79%	152,000	162%	94,0
Mid January	4,900	4,300	4,500	4,000	3,100	3,500							105,000	112%	85,000	90%	160,000	170%	94,0
February	4,900	4,300	4,500	4,000	3,200	3,500	7,000						100,000	106%	79,000	84%	146,000	155%	94,0
Mid February	4,900	4,300	4,500	4,000	3,400	3,500	7,000	27,000	42,000	17,000			93,000	99%	77,000	82%	137,000	146%	94,0
March	4,900	4,300	4,500	4,000	3,500	3,800	7,000	28,000	43,000	18,000			96,000	102%	79,000	84%	116,000	123%	94,0
Mid March	4,900	4,300	4,500	4,000	3,500	3,900	7,000	30,000	46,000	17,000			100,000	106%	82,000	87%	120,000	128%	94,0
April	4,900	4,300	4,500	4,000	3,500	4,100	7,500	30,000	42,000	16,500			96,000	102%	79,000	84%	120,000	128%	94,0
Mid April	4,900	4,300	4,500	4,000	3,500	4,100	7,200	25,000	41,000	16,800			90,000	96%	79,000	84%	115,000	122%	94,0
May	4,900	4,300	4,500	4,000 4.000	3,500	4,100	7,900	27,000	40,000	15,100			90,000	96%	79,000	84%	107,000	114%	94,0
Mid May	4,900 4,900	4,300	4,500	,	3,500 3.500	4,100	7,900	32,000	34,000	13,000			87,000	93% 85%	77,000	82% 78%	105,000	112% 99%	94,0
June Mid June	4,900	4,300 4,300	4,500 4,500	4,000 4,000	3,500	4,100 4,100	7,900 7,900	27,000 27,000	33,000 31,000	12,200 11,200	8,000		80,000 77,000	85% 82%	73,000 72,000	78% 77%	93,000 83,000		94,0 94,0
July	4,900	4,300	4,500	4,000	3,500	4,100	7,900	27,000	25,800	12,200	7,500		73,000	78%	72,000	77%	77,000	82%	94,0
Mid July	4,900	4,300	4,500	4,000	3,500	4,100	7,900	27,000	25,800	11,200	7,000		72,000	77%	71,000	76%	75,000		94,0
August	4,900	4,300	4,500	4,000	3,500	4,100	7,900	27,000	25,800	11,300	7,000	5,500	72,000	77%	, 1,000	7070	, 3,000	8078	J4,€
Mid August	4,900	4,300	4,500	4,000	3,500	4,100	7,900	27,000	25,800	11,300	7,000	3,300	72,000	1 1 70					I
September	4,900	4,300	4,500	4,000	3,500	4,100	7,900	27,000	25,800	11,300									ı
Mid September	4,900	4,300	4,500	4,000	3,500	4,100	7,900	27,000	25,800	11,300									ı
wiid September	4,300	4,300	4,300	4,000	3,300	4,100	7,300	27,000	23,000	11,300									





# Proposed Operation Taylor Park Reservoir Aug 1st forecast = 77% (72,000) af August 9, 2022

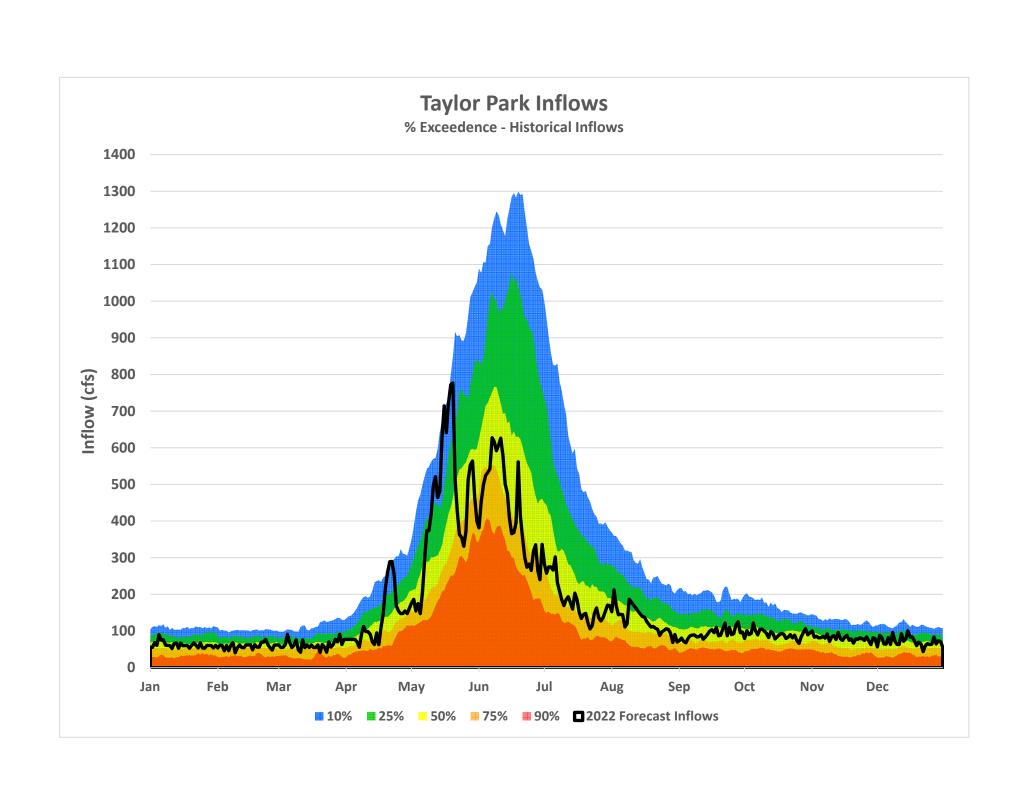
		Average		Average	EOM	EOM
	Inflow	Inflow	Outflow	Outflow	Content	Elevation
<u>Month</u>	<u>ac-ft</u>	<u>cfs</u>	<u>ac-ft</u>	<u>cfs</u>	<u>ac-ft</u>	<u>ft</u>
No. 4 45	0.000	70	0.000	7.5	58,892	0000 74
Nov 1-15 Nov 16-30	2,320 2,000	78 67	2,230 2,240	75 75	58,982 58,742	9302.74 9302.57
Dec 1-15	1,930	65	2,210	74 74	58,462	9302.38
Dec 16-31	2,590	82	2,350	74	58,702	9302.55
Jan 1-15	1,920	65	2,020	68	58,602	9302.48
Jan 16-31	1,880	59	2,140	67	58,342	9302.30
Feb 1-15	1,560	56	1,900	68	58,002	9302.06
Feb 16-28	1,690	61	1,930	70	57,762	9301.88
Mar 1-15	1,830	62	2,050	69	57,542	9301.72
Mar 16-31	1,990	63	2,210	70	57,322	9301.56
Apr 1-15	2,440	82	2,160	73	57,602	9301.76
Apr 16-30	5,390	181	3,750	126	59,242	9302.92
May 1-15	10,110	340	4,140	139	65,212	9306.97
May 16-31	16,830	530	7,990	252	74,052	9312.57
Jun 1-15	15,790	531	10,810	363	79,032	9315.53
Jun 16-30	10,060	338	8,160	274	80,932	9316.63
Jul 1-15	6,690	225	7,770	261	79,852	9316.01
Jul 16-31	4,580	144	7,670	242	76,762	9314.20
Aug 1-15	4,640	156	6,820	229	74,582	9312.89
Aug 16-31	3,250	102	6,350	200	71,482	9311.00
Sep 1-15	2,480	83	4,660	157	69,302	9309.63
Sep 16-30	3,020	102	2,980	100	69,342	9309.65
Oct 1-15	2,840	95	2,980	100	69,202	9309.56
Oct 16-31	2,760	87	2,700	85	69,262	9309.60
	_,. 30	٠.	_,. 30	30	,- <b></b>	

71,890 = April-July inflow

76% of normal

80,923 = Maximum Content

	TAYLOR PARK RESERVOIR - WY2022 - ANNUAL OPERATING PLAN MONTHLY SUMMARY													
	TAYLOR PA	RK RESER				AN MONTHLY S	UMMARY							
			MOS	PROBABLE I	NFLOW									
Timestep	Inflow Volume (Acre-	% of Average	Reservoir Release Volume (Acre-	Average Monthly Reservoir Release	% of Average Reservoir	End of Month Reservoir Live Storage (Acre-	% of Average Live	End of Month Reservoir						
(Month)	Ft)	Inflow	Ft)	(CFS)	Release	Ft)	Storage	Elevation						
OCT 2020	4,390	69%	5,390	88	47%	68,392	99%	9309.05						
NOV 2020	4,140	85%	4,940	83	76%	67,453	102%	9308.45						
DEC 2020	3,940	87%	5,040	82	92%	66,353	99%	9307.72						
JAN 2021	3,740	86%	5,030	82	102%	65,063	98%	9306.88						
FEB 2021	3,470	92%	4,830	87	109%	63,703	97%	9305.97						
MAR 2021	3,830	87%	5,460	89	84%	62,073	98%	9304.88						
APR 2021	6,810	81%	5,260	88	52%	63,623	101%	9305.92						
MAY 2021	16,070	60%	9,600	156	68%	70,093	91%	9310.13						
JUN 2021	23,630	57%	15,820	266	79%	77,903	76%	9314.87						
JUL 2021	10,960	56%	16,450	268	70%	72,413	75%	9311.57						
AUG 2021	6,890	70%	15,050	245	79%	64,253	76%	9306.35						
SEP 2021	3,880	56%	9,550	160	55%	58,583	82%	9302.46						
OCT 2021	4,570	71%	4,620	75	40%	58,892	85%	9302.69						
TOTALS	91,930	65%	101,650	140	71%									
Apr-Jul	57,470	60%	47,130		70%									
WY 2022														
NOV 2021	4,320	89%	4,470	75	69%	58,742	89%	9302.57						
DEC 2021	4,520	100%	4,560	74	83%	58,702	88%	9302.55						
JAN 2022	3,800	87%	4,160	68	85%	58,342	88%	9302.30						
FEB 2022	3,250	86%	3,830	69	87%	57,762	88%	9301.88						
MAR 2022	3,820	87%	4,260	69	65%	57,322	90%	9301.56						
APR 2022	7,830	93%	5,910	99	59%	59,242	94%	9302.92						
MAY 2022	26,940	100%	12,130	197	86%	74,052	96%	9312.57						
JUN 2022	25,850	63%	18,970	319	95%	80,932	79%	9316.63						
JUL 2022	11,270	57%	15,440	251	66%	76,762	79%	9314.20						
AUG 2022	7,890	80%	13,170	214	69%	71,482	84%	9311.00						
SEP 2022	5,500	79%	7,640	128	44%	69,342	97%	9309.65						
OCT 2022	5,600	88%	5,680	92	50%	69,262	100%	9309.60						
TOTALS	110,590	78%	100,220	138	70%									
Apr-Jul	71,890	75%	52,450		78%									
WY 2023														
NOV 2022	4,500	93%	5,100	85	78%	68,700	104%	9309.25						
DEC 2022	4,100	91%	5,200	85	95%	67,600	101%	9308.54						
JAN 2023	4,400	101%	5,200	85	106%	66,800	100%	9308.03						
FEB 2023	3,800	100%	4,700	85	106%	65,900	101%	9307.43						
MAR 2023	4,400	101%	5,200	85	80%	65,100	102%	9306.90						
APR 2023	8,400	100%	9,500	160	94%	64,000	101%	9306.18						
MAY 2023	27,000	101%	13,000	211	92%	78,000	101%	9314.93						
JUN 2023	42,000	102%	17,500	294	87%	102,500	100%	9328.15						
JUL 2023	20,000	102%	23,500	382	101%	99,000	102%	9326.38						
AUG 2023	10,000	102%	22,000	358	116%	87,000	102%	9320.03						
SEP 2023	7,000	100%	18,000	302	104%	76,000	106%	9313.74						
OCT 2023	6,500	102%	12,500	203	109%	70,000	101%	9310.07						
NOV 2023	5,000	103%	5,050	85	78%	69,950	106%	9310.04						
DEC 2023	4,500	100%	5,250	85	96%	69,200	104%	9309.56						
TOTALS	142,100	101%	141,400	195	99%									
Apr-Jul	97,400	101%	63,500		94%									



# **MEMORANDUM**

**TO**: UGRWCD Board of Directors

**FROM**: Cheryl Cwelich, Watershed Program Coordinator

**DATE**: August 19, 2022

**SUBJECT**: Wet Meadows Program Update (August)



During the month of August, the following activities have commenced or been completed in the Gunnison Basin Wet Meadows & Riparian Restoration Collaborative (GBWMRRC):

# **Notable Activities Completed or in Progress:**

# • Monson Gulch Water Right Dispute:

To respect the concerns and demands of the downstream water right on Monson Creek, BLM representatives and District staff breached all twenty-two wicker weirs and redesigned two rock structures to minimize water spreading and keep flows running through the ditch. The BLM will install four flumes along the reach in question to monitor water flows through Monson Creek.

# • Taylor AMG Field Tour:

Information was provided on tools to combat wildfire, including - prescribed burns, fuels reduction, wildlife impacts and watershed considerations. Debris flows are more common in high-intensity wildfires, whereas they are decreased in prescribed burn areas. If preand post- wildfire water quality sampling is desired and funding is available, Jonathan Coop, Director of MS of Ecology and Professor of Environment & Sustainability, is willing to collaborate with the District on creating a project.

# **Other Activities Completed or in Progress:**

- 2022 Construction: Completed restoration structure building at:
  - Mountain Island Ranch (CPW)
  - Pinecrest Ranch (Ute Mountain Ute)

# Research:

Started conversations with United States Geological Survey (USGS) about
 conducting a paired watershed study to demonstrate improved base flows and an

increase in overall streamflow due to wet meadows & riparian restoration erosion control structures.

# • <u>Grant Opportunities</u>:

- Submitted grant application of \$17,250 to GOCO for the Western Colorado Conservation Corp (WCCC) to assist with restoration work on Razor Creek and Horn Gulch in 2023.
- o Awaiting final grant award announcement for the "America the Beautiful" grant of \$100,000 for wetland assessment, to be announced in November 2022.
- The Program was not awarded Congressional Directed Spending (CDS). The North American Grasslands Act, introduced by Senator Bennet had similar language and if passed, could provide funding for grasslands and sagebrush ecosystems.

# • Outreach:

- Plans are being finalized for the season's big volunteer event with Wildlands Restoration Volunteers (WRV) and High Country Conservation Advocates (HCCA) over Labor Day weekend (September 2<sup>nd</sup> – 5<sup>th</sup>).
- Students from Western Colorado University (WCU) will be assisting with an educational workshop on restoration practices at Wolf Creek on September 13<sup>th</sup>.

**Scientific Endeavors** 

**STOR Committee Update** 

**CO** Water Congress Conference Summary

**Miscellaneous Matters** 

# Planning to buy an Electric Vehicle?

Enphase now provides high quality EV Chargers in North America. Learn More 💌

# Reports

# **Monthly Energy Production Report**

Generated for Beverly Richards on 08/17/2022

# **UGRWCD**

Gunnison, CO

This report provides energy production for August.

Peak Power	Energy Produced
5.93 kW	260 kWh
5.92 kW	295 kWh
5.92 kW	51.5 kWh
0 W	0 Wh
0 W	0 Wh
	606 kWh
	1.14 MWh
	7.80 MWh
	33.6 MWh
	5.93 kW 5.92 kW 5.92 kW

Your Carbon Offset for this month: 947.000000000001 lbs

You have offset the equivalent of: 7 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

PRELIMINARY - SUBJECT TO REVISION

Т(

Daily Summary for Month --> Aug

	Taylor Park Reservoir						Sil	Silver Jack Reservoir					Aspinall Unit							GUNNISON TUNNEL ALLOCATION    Contract   Streamflow and Divs   Type of Water Diverted into Tunnel   Tot 1st fill																	
	River Call Average Flow							Reservoir			st Fill 2	Fill 2nd Fill Other Aspinall		Reservoir		BP Accr	BP Accnt AU Accnt		Reservoir Contents			Total As	spinall Unit	t Inflow	1st Fill	Contract Streamflow and Div			/S		Type of Wa	ater Div	erted into T	Γunnel		Tot 1st fill	
	O'lease leade	TP	Excess Released	Tunnel (GT) Shortage	Average								Other															0.00		OT Div		OT Division	GT Di	ivs - WC GT Di			Barratio
	Silver Jack Reservoir & Juniors In Priority		s TP Inflow		Excess TP Inflow and AU Nat		TP Res.	TP - USGS				2nd Fill -	Account Storage		SJ Res	SJ Inflow to Reservoir	BP -	AU Water	BM R	Res MP Re	s CR Re	С	AU hange In (		AU inflow below TP & with		UGRWC D Contract	Gun. River below East	Total Gunnison	minus TI	w GT Div: P TP		D Contr	Rel fr	om GT Dir Fill 1st F	ill	Remain. 1st Fill Credits in TP and
Day of Month	(1=Yes, 0=No)	(1=Yes, 0=No)		Inflow (cfs)	Inflow (cfs)	Inflow (cfs)			w d In	flow i		- in TP		e in TP		Storage (cfs)	Storage		- Conte	ent Conter	t Conter	nt S	torage	rel from	AU Aug Rel (cfs)	#REF!	water (af)	Portal (cfs)	Tunnel Divs (cfs	inflow		/ AU Excl	,		ish BM		AU
(1)	(2)	(3)	(5)	(6)	(CIS) (7)	(8)	(ai) (11)	(14)				(25)				(39)	(43)	) in SJ (a (47)	, , ,	, ,	(100)		(ar) (124)	(125)	(127)	#REF!	\ /	(128)	(131)	/ /	. ,			/	, ,	,	F! (ai) F! (140)
1 2 3	1 1 1	1 1 1				•	76,585 76,552 76,433	2 22	29	161 221 178					8,989 8,978 8,881	(	0 8,98 0 8,97 0 8,88	3	0 0 0	110,8 <sup>2</sup> 110,7 <sup>2</sup> 111,02	4 15,1	00		1,632 1,630 1,631				544 544 54	1,08	6			0 0 0	0 0 0			
4	1	1					76,266 76,099			154 155					8,837 8,761	(	8,83 8,76		0 265	110,97 766 110,95				1,631 1,610				54: 54:					0	0			
6	1	1					75,932		29	154					8,663	(	8,66		0 365,	111,03		_		1,586				54					0	0			+-
7 8 9	1 1 1	1 1 1					75,698 75,481 75,213	1 22	29	120 128 103					8,542 8,412 8,269	(	8,541 8,411 8,26	2	0	110,75 110,73 110,68	6 15,3	57		1,589 1,592 1,594				540 540 540	1,04	6			0 0 0	0			
10	1	1					74,946	3 23	31	105					8,115	(	8,11	5	0	110,14	9 15,8	97		1,597				540	1,05	1			0	0			
11 12	1	1 1					74,680 74,433		32 32	107 116					7,968 7,814	(	7,96		0	110,39 110,60				1,603 1,611				549 54	,				0	0			
13	1	1					74,153	3 23	31	99 99					7,665 7,504	(	7,66	5	0	110,60	3 16,4	23		1,611				54	7 1,06	4			0	0			
14 15	1	1					73,873 73,593	3 23	31	99					7,304	(	7,50 7,38	3	0	110,75 110,77	6 16,3	71		1,612 1,623				549 549	9 1,07				0	0			
16 17	1	1 1					73,477		0	182					7,278	(	7,27	3	0	111,08	3 16,3	77		1,622				549	9 1,07	3			0	0			
18 19 20	1 1 1	1 1 1							0 0 0															0					) ) )	0				0			
21 22 23	1 1 1	1 1 1							0 0 0																				) )								
24 25	1	1							0																				)								
26 27	1 1	1							0																				)								
28 29 30 31	1 1 1	1 1 1							0 0																				) ) )								
Total	31	31	C	) (		0 0		3,68		2,178						(	0							25,772				8,74			0	0	0	0	0	0	0
Tot (af)	1	1	0	) (		0 0	73,477		0	99	0	0	0	0	7,278	(	7,27			766 110,14			0	0	0	0	(	) (	33,77	0	0	0	0	0	0	0	0 0
Max	1	1	0	) (	) (	) (	76,585	b 23	32	221	0	0	0	0	8,989	(	8,98	)	υ <u> </u> 365,	766 111,08	3 16,4	23	0	1,632	0	<u> </u>	] (	549	9 1,08	б	0	0	U	0	0	0	<u> </u>

Annual Summary (all values in ac-ft) Note: Reservoir content is the end of the month content

	(days)	(days)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(af)	(-	af)	(af)	(af)
Nov	30	30					58,737	4,470	4,632					1,713	300	1,713	0		110,430	15,977		20,025			19,420	604			0					
Dec	31	31					58,695	4,564	4,521					1,790	166	1,790	0	231,059	105,687	16,102		20,080			18,851	1,229			0					
Jan	31	31					58,327	4,412	4,043					1,880	90	1,880	0	236,731	104,652	16,186		19,520			18,453	1,067			0					
Feb	28	28					57,749	4,096	3,518					1,870	10	1,870	0		105,444	15,052		17,228			16,989	239			0					
Mar	31	31					57,303	4,581	4,135					1,977	107	1,977	0		108,948	16,820		32,745			24,617	8,128			0					
Apr	30	30					59,219	5,945	7,861					4,629	2,652	4,629	0		111,643	16,753		54,717			23,481	31,237			0					
May	31	31					74,021	11,966	26,989				1	13,147	8,806	13,147	0		110,673	16,481		107,604			48,437	59,167			0					
Jun	30	30					80,852	18,929	26,111				1	12,428	127	12,428	0		109,718	16,853		82,474			20,811	61,663			0					
Jul	31	31					76,738	15,449	11,809					9,065	0	9,065	0		110,870	15,418		92,489			27,589	64,900			0					
Aug	31	31						7,301														51,118			17,342	33,777								
Sep	30	30	0	0	0	0		0	0						0						0	0	0		0	0	0	0	0		0	0		
Oct	31	31	0	0	0	0		0	0						0						0	0	0		0	0	0	0	0		0	0		
Total	365	365	0	0	0	0		81,712	93,620						12,257						0	498,000	0		235,989	262,011	0	0	0		0	0	0	
Min	28	28	0	0	0	0	57,303	0	0	0	0	0	0	1,790	0	1,790	0	231,059	104,652	15,052	0	0	0	0	0	0	0	0	0		0	0	0	0
Max	31	31	0	0	0	0	80,852	18,929	26,989	0	0	0	0 1	13,147	8,806	13,147	0	236,731	111,643	16,853	0	107,604	0	0	48,437	64,900	0	0	0		0	0	0	0

OPEN THIS IN YOUR BROWSER



LOG IN TO THE SUN EMAIL SETTINGS HELP & FAQ SEND US A TIP

**Hey there!** Want to get the best free news round-up in Colorado delivered right to your inbox?

Sign up for The Sunriser!

Wednesday, August 17, 2022

# Water cuts are coming to the Southwest — just not necessarily right now

Plus: Delta County liked the sheep idea, CORE Act supporters push Biden for executive action, and how should history be told?



If you're like me, the thought of being forced to reduce the amount of water you use is an anxiety-inducing one. But it's going to happen, and it's past time we each start considering how our personal water consumption is going to be affected.

Tuesday's news that cuts are planned for **Arizona**, **Nevada** and **Mexico** (more on this below) was a stark reminder that the drought facing the West is changing our reality, and that cuts are coming.

For many reasons, though, it's wise not to wait for the government to impose those cuts. This guide from the Environmental Protection

Agency is a good starting point, listing easy ways you can start reducing your water use both indoors and outdoors.

I know I could cut my hot showers in half, and use my dishwasher more in lieu of hand-washing my dishes. I already rely on a Brita pitcher for my daily drinking water, and try to use my coffee maker's entire reservoir before replacing it. There's surely more I can do, and that's the mindset we should all probably start using.

I don't have a lawn and will likely forever be priced out of having one, but those who do have a lot to consider with how their outdoor water use should be mitigated. The above EPA article says 30% of household water use is devoted to outdoor water use, which I thought was pretty high.

8/17/22, 11:36 AM

https://mailchi.mp/coloradosun/sunriser-469216?e=a7c7bed89b&fbclid=lwAR2DotKyS2nB\_x9wUkAsyCjLjVFA0z2W8pUPezOO\_...
Homeowners can look for appliances and products that have the

WaterSense label, for which the EPA has a handy guide on their website.

It's easy to think that one person can't do enough to fix what's already broken. Pretty soon, though, those individual choices aren't going to be up to us. It's time to consider how to reduce water consumption now.

Today, we take a deeper look at water, rethinking history and how hungry sheep helped drive political change.

>> 👤 Kevin



Become a member

MENU

W.V.S

WHITE STATES

motionally

ENVIRONMENT

HIH

DEINHON

NEWSLETTING

LODEASIS

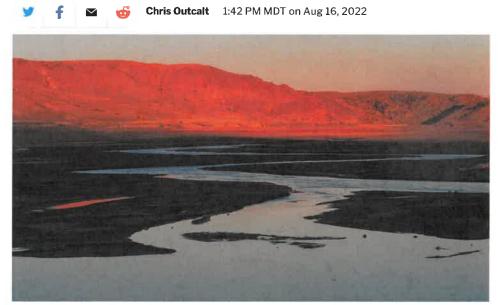
ABOL

MESCOUNT

WATER

# Southwest states given more time to agree on water cuts to prevent largest reservoirs from reaching critically low levels

Despite giving states more time to negotiate, federal officials said some cuts were coming to parts of the Colorado River Basin



Blue Mesa Reservoir in Gunnison County shows the effect of a water draw down on October 29, 2021. The reservoir has lowered because water from it is being released downstream to increase the volume of water available to downstream users that rely on the Colorado River. Blue Mesa is fed by the Gunnison River, one of the Colorado River's largest tributaries. (Dean Krakel, Special to The Colorado Sun)

Credibility: Original Reporting Sources Cited Subject Specialist

F

ederal officials Tuesday gave more time to Colorado and its neighboring states to agree on the massive cuts in Colorado River



use needed to protect the country's two largest reservoirs, even as they announced that historic cuts were coming to parts of the Southwest.

Officials said that Lake Mead, east of Las Vegas, would operate in its first-ever "level 2a shortage condition" in 2023, triggering previously agreed upon reductions in water use in Arizona, Nevada and Mexico. California does not take cuts under this shortage level.

In Arizona, the cuts amount to 592,000 acre-feet, or 21% of the state's annual apportionment. In Nevada, the cuts will be 92,000 acre-feet, or about 8%. And Mexico will take a 7% or 104,000 acre-foot hit.

Bureau of Reclamation Commissioner Camille Touton said during a Tuesday call with reporters that the federal government would continue to work with the seven Colorado River Basin states to find consensus on new water cuts in response to federal officials identifying the need for 2 million to 4 million acre-feet in water savings needed next year. Officials identified those cuts as necessary to protect critical infrastructure at Lake Powell and Lake Mead as well as hydropower production.

Touton, however, gave no indication as to what specific cuts the federal government is willing to make if a collective agreement is not eventually reached. Instead, she said, "more information will be forthcoming regarding next steps and the process that we will follow."

There was little in today's announcement that was responsive to the commissioner's call for 2 to 4 million acre-feet reduction in use, said Jack Schmidt, director of the Center for Colorado River Studies at Utah State University.

"None of the numbers that were talked about today had anything to do with the 2 to 4 million acre-foot call," Schmidt said. "Essentially, in the nicest of ways, the announcement today said we aren't there yet. I'm not going to say we failed because we can't fail. But they certainly said 'we missed the deadline and we're going to keep working at it.'"

Federal officials initially gave the states two months to come up with ideas for how to meet that target, with a Tuesday deadline.

TODAY'S UNDERWRITER

Recommended

VIDEO: The future of the Colorado River and what that means for our state

"There are a lot of conversations about how we collectively mitigate the impacts of drought and climate change on the Colorado River and our shared goal of formulating durable and equitable solutions,"



Touton said during the call. "But to date, the states collectively have not identified and adopted specific actions of sufficient magnitude that would stabilize the system."

Touton and other officials continually stressed the need for a collaborative approach.

"We're continuing to work with the basin states because we believe that the solution here is one of partnership," Touton said.



# Essentially, in the nicest of ways, the announcement today said we aren't there yet.

- Director of the Center for Colorado River Studies at Utah State University Jack Schmidt

"There's still time for that," said Tommy Beaudreau, deputy secretary of the interior.

Water managers also said they would study whether it might be possible to operate Lake Powell at a level below what is now considered "deadpool," the level at which water cannot flow beyond the dam.



The bureau also said it would work with the Upper Basin states of Colorado, Utah, New Mexico and Wyoming, tribes and other stakeholders to implement "substantial releases from Upper Basin reservoirs" to help prop up the water level at Powell.

Lake Powell could fall below elevation 3,490, the lowest level at which Glen Canyon Dam can generate hydropower, as early as sometime next year, according to the bureau's latest report.

# Upper Basin looks south

Flows on the Colorado River have declined roughly 20% since 2000 amid a drought scientists believe is the driest 22-year stretch in the past 1,200 years.

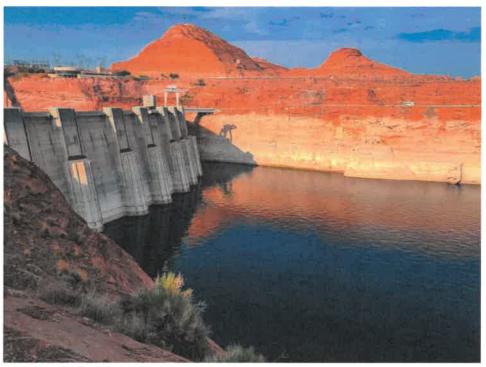
Forty million people rely on the Colorado River for drinking water and farmers and ranchers use the water to irrigate millions of acres of farmland.

"Every sector in every state has a responsibility to ensure that water is used with maximum efficiency," assistant secretary for water and science Tanya



Trujillo said in a written statement. "In order to avoid a catastrophic collapse of the Colorado River System and a future of uncertainty and conflict, water use in the Basin must be reduced."

The Upper Basin responded to the commissioner's call for cuts in a July 18 letter. The letter laid out an Upper Basin plan for conservation, but did not identify a specific amount of water that could be saved.



Glen Canyon Dam at Page, Arizona. holds back the massive Lake Powell. Since this photo was taken on Aug. 21, 2021, drought conditions in the West have led levels of water in the lake to drop near where the dam will no longer be able to generate electricity. (Bureau of Land Management)

Signed by Charles Cullom, the executive director of the Upper Colorado River Commission, the letter noted that the options available to the Upper Basin states to help maintain critical reservoir elevations are "limited," and that "significant actions" would need to be taken downstream of Lake Powell.

## Recommended

Upper Basin states layout plan to help the Colorado River, but still say Lower Basin needs to chip in more

Top water officials in Colorado have maintained the majority of the cuts identified by the commissioner would need to come where most of the water is used — the Lower Basin states of California, Arizona and Nevada.

Colorado River Commissioner Becky Mitchell said discussions about how to cut water use will continue among the seven basin states.

"I think what we saw today is there is not a plan out of the Lower Basin states," Mitchell said. "I'm still hopeful that there will be discussions with



our Lower Basin comrades to come up with something."

Mitchell also reiterated that the Upper Basin plan would not be as effective without significant action downstream.

"This will require leadership from the U.S. Department of the Interior through the U.S. Bureau of Reclamation, and bold action across the Basin," Mitchell said in a statement. "Downstream of Lake Mead and Lake Powell, depletions must come into balance with available supply."

In 2021, according to Bureau of Reclamation numbers compiled by the UCRC, the Upper Basin used about 3.5 million acre-feet. That provisional number includes water lost to evaporation. The UCRC numbers show 2021 water use plus evaporation losses in the Lower Basin at nearly 10 million acre-feet, which includes about a 1.5 million acre-foot portion for Mexico.

# Water lost to evaporation

It's unfortunate that the states haven't arrived at meaningful reductions in consumptive use, Andy Mueller, general manager of the Colorado River District, said.

"I think it's even more unfortunate that the Bureau and Department of the Interior have tools at their disposal that could make meaningful progress toward that and have shown an unwillingness to implement those tools," he said.

At the moment, water lost to evaporation in Lower Basin reservoirs and during transit is not factored into the overall calculations in Arizona, California and Nevada. Mueller said federal water managers including those numbers would account for a significant amount of water.

"If you assess those losses against contracting parties then their total consumptive use would drop by 1.2 million acre-feet," Mueller said. "But right now the whole system gets hit with that. They call it a structural deficit, we call it overuse."

Among other points, the Southern Nevada Water Authority suggested the Lower Basin states should account for water lost to evaporation in a letter sent to federal water managers this week.



"Charge each contractor for evaporation losses in the Lower Basin so that the Lower Basin can reduce its reliance on excess water from the Upper Basin to balance reservoirs," John Entsminger, general manager of the Southern Nevada Water Authority, wrote.

"If you want water, and you need it this year, the bureau should be doing that right now," Mueller said. "My understanding is they're afraid of litigation from the Lower Basin, specifically California, and my answer to that is leadership involves risks and they need to exhibit leadership now."



With green weeds growing on the dry shoreline, a pair of boats travel the Blue Mesa Reservoir Monday July 11, 2022. (William Woody, Special to The Colorado Sun)

Water lost through evaporation is already factored into Upper Basin numbers.

Utah State's Schmidt also said now is a time that "demands federal leadership."

"The federal government needs to be the grownup in the room," he said.

Although the bureau indicated today that it might consider the evaporation issue, Mueller said the lack of specific language frustrated him.

"Why are we in a crisis? Yes, climate change is playing a role, but we are also in a crisis because of the bureau's failure to institute proper accounting on the Lower Basin," Mueller said. "It's frustrating that they're going to 'prioritize and prepare for additional administrative initiatives.' Frankly, George Orwell could have written that sentence."

# Preserving the dam

Depending on snowpack and runoff, between 600,000 and 4.2 million acre-feet will need to be conserved over the next four years to stabilize



lakes Powell and Mead, according to a Bureau of Reclamation analysis. (An acre-foot is the amount of water it takes to cover an acre in a foot of water or about 325,000 gallons, enough for about two or three households annually.)

#### Recommended

How much water is lost in the transfer between Flaming Gorge and Lake Powell?

The bureau also released on Tuesday its August 24-Month Study, a key report that indicates how Powell and Mead will operate in the upcoming year, which triggered the cuts for Arizona, Nevada and Mexico. The study projects the water level at Lake Powell in January 2023 will be at about 3,522 feet above sea level, 32 feet above the elevation at which Glen Canyon Dam can no longer generate hydropower, 3,490 feet.

It will be at least another couple months until officials can start to predict how the next snow season may or may not help this problem, said Jeff Lukas, an independent water and climate researcher based in Lafayette.

"In terms of what's happening hydrologically, we'll start observing and speculating as early as October and November, but not until mid-December is there really enough on the ground to tip you off as to how the rest of the year might play out," Lukas said. "What you do know going into October and November is the soil moisture, which we've seen is pretty important when it's massively depleted."

This year, water managers will send 500,000 acre-feet from Flaming Gorge Reservoir on the Utah-Wyoming border to Powell. Last year, federal officials pursued emergency action that included releasing 36,000 acre-feet from Blue Mesa Reservoir near Gunnison and 125,000 acre-feet from Flaming Gorge.

The bureau said that other actions specific to the Upper Basin would include studying whether modifications could be made to Glen Canyon Dam so that water could be pumped or released below below certain low water elevations.

Matt Rice, director of the Colorado Basin program at American Rivers, said that although he understands the bureau is in a tough position, he was a little surprised by the lack of specifics in the federal announcement Tuesday.

"We are in a crisis mode, and I appreciate the bullet points," Rice said, "but I was a little surprised by how broad it was."

Nevertheless, the federal officials on Tuesday's call said the stakeholders in the Colorado River Basin could achieve meaningful change by working together.



"The solution to our challenges relies on the bedrock of a century of collaboration and partnership in the Colorado River Basin," commissioner Touton said. "But as water stewards, it is our responsibility to protect the system and the millions of Americans who depend on it."

**We believe vital information needs to be seen** by the people impacted, whether it's a public health crisis, investigative reporting or keeping lawmakers accountable. This reporting *depends* on support from readers like you.

#### BECOME A MEMBER!









#### **Chris Outcalt**

Chris Outcalt covers Western water issues for The Colorado Sun.

Read More: Becky Mitchell Bureau of Reclamation Colorado River Colorado River Drought Plan

# The Latest

#### **EDUCATION**

Colorado students have recovered some academic ground since COVID arrived but deficits remain, test results show

The state education department has released results of standardized tests from the spring. Student scores improved over 2021 in some grades and subjects but still lag behind pre-pandemic outcomes.

Erica Breunlin 11 minutes ago



#### **ENVIRONMENT**

# Summit Stage gets \$35 million federal grant for electric bus operations center that will serve ski country

U.S. infrastructure bill grants millions more to other rural Colorado bus agencies to buy electrics, hybrids, and CNG options.

Michael Booth 4:08 AM MDT



#### CLIMATE

# Delta County leaders reverse course, say "shear thing" to plan for big solar project on land where sheep graze

The 475-acre Garnet Mesa project had been rejected by Delta County commissioners in March over concerns about the loss of farmland and in the face of opposition from neighbors

Mark Jaffe 3:55 AM MDT



#### **EQUITY**

# How should history be told? Rising Colorado voices are pushing museums to rethink their approach

History Colorado is changing exhibits about Lincoln Hills, Sand Creek Massacre as the museum industry pushes to fix narratives that sanitized history or left out voices of underrepresented communities







# Arizona and California Farmers, Targets for Colorado River Cuts, **Draft Their Conservation Strategy**

Nearly 1 million acre-feet of compensated water cuts are being discussed.



Farm fields resemble a mosaic in California's Imperial Valley. The Imperial Irrigation District holds more rights to Colorado River water than any other user in the basin. Photo @ Brent Stirton/Reportage by Getty Images for Circle of Blue

### By Brett Walton, Circle of Blue - August 4, 2022

- · A plan is circulating among irrigation districts in southern Arizona and California to reduce Colorado River use by as much as 925,000 acre-feet.
- · Such a plan would require billions in funding.
- · These discussions foreshadow difficult negotiations in the coming years to balance water demand with a declining supply.

Knowing they are targets, farmers in southern Arizona and California who receive irrigation water from the Colorado River are discussing a plan that could go a long way toward meeting a federal conservation mandate in the drying basin.

With key reservoirs Mead and Powell at record lows and despite the continued decline of the Salton Sea, federal officials are demanding historic cuts in water use next year, on the order of 2 million to 4 million acre-feet, or roughly one-third of the river's recent annual flow.

Irrigation districts in Arizona's Yuma County and California's Imperial and Riverside counties control more of the river's water than any other entity in the basin. The Colorado River Indian Tribes, whose reservation abuts the river, also hold significant secure water rights.

A plan is now circulating among those districts to forgo 1 acre-foot of water per irrigated acre next year. In the Yuma area that amounts to a 20 percent cut, according to Tom Davis, manager of the Yuma County Water Users' Association.

#### **Recent Posts**

A Uranium Ghost Town in the Making The Stream, August 17, 2022: **Drought May Worsen Across** England, Bringing More Water Restrictions Colorado River States Face Deeper Water Cuts - With More on the Way Dry: A Weekly Western <u>Drought Digest — August 16,</u> 2022 What's Up With Water -August 16, 2022

Search

# Subscribe: Weekly Waternews

Q

indicates required Fmail Address First Name Last Name Company | Organization

Please also subscribe me to the daily Stream

☐ Daily Stream

Please also subscribe me to the Federal Water Tap

Federal Water Tap

Subscribe

The emergency actions foreshadow difficult negotiations that will take place in the coming years as a river that irrigates 5 million acres and supplies 40 million people with a portion of their drinking water is decimated by a drying climate. Agriculture consumes about 80 percent of the basin's water, making it a cornerstone for bringing demand in line with supply.

The discussions today could set the tone. As many as 925,000 acre-feet could be part of the current deal, about half or a quarter of the total cuts the federal government is seeking.

The forgone water would remain in Lake Mead, which is at its lowest level since 1937, when the big reservoir was being filled. Federal officials want to prevent a catastrophic outcome: the reservoir dropping so low that it can no longer generate hydropower or deliver water downstream.

Irrigation districts are willing to contribute — as long as they are paid.

"If agriculture steps up and makes it possible for the river to survive, they are taking a huge risk for their industry," said Wade Noble, coordinator of the Yuma County Agriculture Water Coalition, which represents farmers in southwest Arizona. "And that risk and the cost analysis that goes into it is going to require some sort of compensation because they have a water right."

The dollars at play could be significant. A range of values are being discussed, but a center point is \$1,500 per acre-foot. If all 925,000 acres participated in the program, the total cost would be \$1.4 billion a year.

It is unclear at this point how many irrigation districts are on board. Camille Touton, the commissioner of the Bureau of Reclamation, told the states to present a plan by mid-August. But observers in the basin do not consider that a firm deadline. Davis cited the accelerated timeline and delicate nature of the negotiations.

Noble outlined the agriculture conservation plan at the <u>July 13 meeting</u> of the Arizona Reconsultation Committee, a group that is advising the state government on Colorado River negotiations. He suggested a four-year program with a total cost between \$4 billion and \$8 billion.

"As we look at the risk to economies," Noble added. "As we look at the risk to other industries. As we look at the risk to our urban areas, we don't believe that you can say that is too much money."

Noble did not return multiple phone messages seeking comment.

Robert Glennon, a water law and policy expert and professor emeritus at the University of Arizona said that though the dollar figures may seem high at first glance, they are miniscule compared with the risks involved.

"Why should that be a deal breaker?" Glennon asked about a nearly \$2 billion annual price tag. "I mean, it's only a one-year deal. But it's wet water that saves everyone's bacon while you're trying to develop some long-term criteria."

These irrigated areas are among the harshest climates in the United States, arid lowland regions of the Sonoran Desert that receive no more than 4 inches of rain in an average year.

The Colorado River is the ingredient that turned these drylands green. Applying more than 5 feet of water per acre of land each year allows farmers in Imperial Irrigation District, Wellton-Mohawk Irrigation District, Palo Verde Irrigation District, and a half dozen others to produce a staggering bounty of vegetables, grains, forage, and seed crops. Growing more than 100 crops, these counties are among the richest farming regions in the country, each generating more than \$1 billion in sales in 2021.

The steady flow of the Colorado is the fuel that powers the ag machine. The threat that the



Bell peppers are one of roughly a hundred crops grown in Imperial Irrigation District. Photo @ J. Carl Ganter/Circle of Blue

spigot will be turned off has brought the irrigation districts to the table.

If dividing the river during a period of shortage were based purely on the law, then the irrigation districts would not have to worry. They hold some of the most legally ironclad rights to the river, those that are last in line for cuts.

Imperial Irrigation District, the largest of the bunch, has claim to 2.6 million acre-feet for irrigation, nearly as much water from the Colorado River as the entire state of Arizona. That water nurtures about 470,000 acres of alfalfa, Bermuda grass, Sudan grass, sugar beets, onions, lettuce, and other crops. Secured by a U.S. Supreme Court decree, Imperial's water rights would be the last to be touched.

The political reality, however, is altogether different, according to Michael Pearce, an attorney with Gammage and Burnham who has more than three decades of experience in Arizona water law and policy.

"In a practical sense, you can't see the cities of Phoenix and Los Angeles, and even Las Vegas and some of the cities on the Colorado River - Bullhead City, Lake Havasu City - have their water supply cut off so that you can grow alfalfa in Yuma and in the Imperial Valley," Pearce told Circle of Blue. "This cannot be a practical solution."

The Central Arizona Project, the 336-mile canal that supplies Phoenix and Tucson, has junior water rights to the Colorado River. But Arizona's water leaders have publicly stated that they will not sign any agreement that allows the canal to run dry.

Leaders in the four upper basin states of Colorado, New Mexico, Utah, and Wyoming are also looking downstream for solutions. In a July 18 letter they argued that the burden of the conservation mandate should be placed on Arizona, California, and Mexico, which together use more than double the water than the upper basin. Besides the irrigation districts, urban suppliers in the basin are also putting forward conservation plans.

Another factor in the irrigation districts' willingness to come to the table is that the mechanics of water delivery will eventually triumph over the law. Even the most secure legal rights are worthless if Mead sits at dead pool and no water can pass downstream.

How might the farmers be paid off? Glennon and Pearce noted a number of options. Congress could appropriate money. A wildfire and drought response bill that the House passed at the end of July authorizes \$500 million to prevent Mead and Powell from declining to unacceptable

levels. Or the White House could declare a federal disaster. Any outcome, they said, would likely require states to contribute funds.

Those are potential short-term actions. In the long run, the current water rights arrangement is untenable, Glennon said. The drying basin has a structural deficit - more promises of water than physical water to distribute. The states, tribes, and federal government will have to not only rebalance water supply and demand, but also address the shrinking Salton Sea.

"That conversation has to take place," Glennon said.

Located north of Imperial Irrigation District, the Salton Sea is an agricultural sump, a desert depression that receives most of its water from farm runoff. Less irrigation means less water flowing into the sea. A receding shoreline exposes more seabed salts and chemicals to winds. The area has some of the nation's worst air quality.

Whether a system established more than a century ago that privileges desert agriculture is compatible with a hotter, drier, ecologically imperiled, urbanized 21st century is a question that will take years to resolve — but with little time to waste.



#### **Brett Walton**

Brett writes about agriculture, energy, infrastructure, and the politics and economics of water in the United States. He also writes the Federal Water Tap, Circle of Blue's weekly digest of U.S. government water news. He is the winner of two Society of Environmental Journalists reporting awards, one of the top honors in American environmental journalism: first place for explanatory reporting for a series on septic

system pollution in the United States (2016) and third place for beat reporting in a small market (2014). He received the Sierra Club's Distinguished Service Award in 2018. Brett lives in Seattle, where he hikes the mountains and bakes pies. Contact Brett Walton



This site uses cookies. By continuing to browse the site, you are agreeing to our use of cookies.

Learn more OK

# Cookie and Privacy Settings

#### How we use cookies

We may request cookies to be set on your device. We use cookies to let us know when you visit our websites, how you interact with us, to enrich your user experience, and to customize your relationship with our website.

Click on the different category headings to find out more. You can also change some of your preferences. Note that blocking some types of cookies may impact your experience on our websites and the services we are able to offer,

Essential Website Cookies

These cookies are strictly necessary to provide you with services available through our website and to use some of its features.

Because these cookies are strictly necessary to deliver the website, refusing them will have impact how our site functions. You always can block or delete cookies by changing your browser settings and force blocking all cookies on this website. But this will always prompt you to accept/refuse cookies when revisiting our site.

# unnison Country

\$1.00 Thursday, August 18,

# Somewhere under the rainbows

Arms full of food, Nolan Frymoyer and Cesar Marmolejo, pedal under a massive double rainbow toward the Sundays@6 concert in Legion Park.

# Wildfire forecast improves

Monsoonal rains and lower temperatures create more favorable conditions

> Paul Wayne Foreman Limes Staff Writer

While water managers have reported that summer rain has done little to improve the water storage outlook in the Upper Gunnison River Basin, the precipitation has had a significant impact on forest conditions and wildfire dan-

Wildfires A6

# INSIDE TODAY

**NEWS:** Residents push CDOT for safer streets, A8-A9

COMMUNITY: Willowfly named Orvis outfitter of the vear. B1



SPORTS: A stellar season start for GHS boys golf, B9

SPORTS B9 OPINION A4-A5, A12 CLASSIFIEDS A14-A17 **OBITUARY A2** 

ONLINE **GUNNISONTIMES.COM** 

# Country Meadows wins preliminary injunction

Ruling places rent increases on hold

Bella Biondini

On Aug. 16, the County Meadows homeowners' association, Organizacion de Nuevas Esperanzas (ONE) won the preliminary injunction that it filed last month against Ski Town Village, LLC, the new owner of the Gunnison mobile home park. The court's decision temporarily suspended the substantial rent increase that went into effect on July 1, as well as late fees.

The future of the Country Meadows, renamed Ski Town Village, mobile home park has

been uncertain since it first went up for sale more than a year ago. Residents, fearing an investor would purchase the property and force them out, tried and failed to purchase the park themselves. On May 4 of this year, homeowners received a letter stating that the park had been sold, and that their rent would rise by 70% on July 1.

ONE filed a complaint and a request for a temporary restraining order in Gunnison District Court against Ski Town Village in July to block an excessive rent increase and for failure to maintain the property and alleviate a lack of running water. On Aug. 8, tenants and community members funneled in and out of the Gunnison County Courthouse throughout a tense,

Country Meadows A7

# **Gunnison moves slowly** toward electrification

Proposed building codes promote solar and electric 'ready' homes



Builders work on a home at Lazy K

Bella Biondini

While the Town of Crested Butte will become the first municipality in Colorado to

require new builds to be all electric starting in January, building officials in Gunnison are now tasked with deciding at what pace and intensity they

Building codes A6



# **VOTE FOR YOUR FAVORITES** 8/22 at 12pm through 9/5 at 12pm.

ONLINE AT GUNNISONTIMES.COM OR GUNNISONSHOPPER.COM · VOTING OPENS 8/22

# Wildfires

from A1

ger. With monsoonal rains forecasted to persist through August, this fall could see a return to "low" risk levels in some areas.

In spring 2022, very little rain fell from late March until June as temperatures began climbing into the mid- and upper-80s. Big fires were burning in New Mexico. Arizona and the Pacific coastal states. The stage appeared to be set for another long fire season in the Upper Gunnison Basin's forests.

"The summer was looking dry, a continuation of the multi-year drought," said Gunnison National Forest Fire Management Officer Patrick Medina. "A third year in a row of drought would have impacted the forests severely, setting the stage for a long wildfire season, and then the monsoon arrived early.

Beginning in mid-June, Colorado's Western Slope forests have been favored with a steady flow of rain, especially at higher altitudes. The current forecast predicts the monsoonal pattern will hold through the end of August.

Although the spotty nature of monsoon thunderstorm activity has meant portions of the national forest have cycled between moderate to high wildfire risk, on balance the rains have bumped up the moisture levels in dead wood, especially for fuel on the forest

As daytime high temperatures come down in late August and September, if the rains continue, the fire danger may drop into the lowrisk category for early hunting season. During a typical monsoon such as the current one, lightning-started fires are often doused without any



Wildflowers bloom at Rustler Gulch in July.

human intervention. However, being careful with fire in the forest remains necessary, Medina said.

Living in the American West's ongoing drought, people can forget that forests, even in a normal year, are susceptible to wildfire, Medina said. As the 2021 Marshall fire showed, destructive wildfires are not limited to forested

Most people are unaware that the lush green grass of mountain meadows — so coveted by ranchers - can burn, albeit slowly, Medina said. With average amounts of rain, mountain and prairie grasses can grow tall. When the rains stop and humidity levels plunge in September and October, the grass dries. Add strong winds, and dry grasses can burn intensely as the Marshall Fire demonstrated.

The Gunnison National Forest hasn't had a large fire in more than 50 years. Compared to other forests, the fire season in the cold Upper Gunnison Basin is short. In normal years, snowdrifts in the forest act as natural fire breaks, sometimes lasting into June. In addition, lower levels of oxygen at high altitudes naturally lower fire intensity. Lastly, Colorado's high country fire season is short, hot and dry. In autumn, after the monsoon abates and before the snow arrives, the forests can dry out, but the risk of lightning-started fire drops dramatically.

#### A biological factor

Alongside the impacts of drought, another element constantly is at work killing trees in the Gunnison National Forest, and setting the stage for destructive wildfire.

"Up until the last 20 years, Colorado's forests were quite healthy," Medina said. "But the forests are changing."

The change is due to beetle infestations. Parts of Colorado, around I-70 and Silverthorne, in the south around La Veta Pass, and the San Juan Mountains have huge swaths of beetle-killed forest. Some 90% of the forest in Summit County has fallen prey to the beetle epidemic.

According to the 2021 Colorado State Forest Service's (CSFS) "Report on the Health of Colorado Forests," the endemic mountain pine beetle and the spruce beetle infestations have affected 80% of Colorado's lodgepole pine forests and 40% of the higher altitude Engelmann spruce forests respectively.

Ongoing drought weakens the trees' defenses by limit-

ing the quantity of resin available to the trees. The trees use resin to trap and overcome insects boring through their bark. Once the defenses are breached, the beetles rapidly spread throughout the tree. In addition. Colorado's warmer temperatures have enabled the mountain pine beetle to thrive in forests at higher alti-

The report described the extent of Colorado's beetle kill problem:

- · One of every 14 trees has died in Colorado's forests.
- · Colorado has 834 million standing-dead trees, ready to burn.
- · The mountain pine beetle epidemic has devastated 3.4 million acres of lodgepole pine forest.
- · Spruce beetle infestations have infected 1.7 million acres of spruce forest.

As long as the drought persists, Colorado's forests will remain vulnerable. In fact, ongoing drought has led to recurrent infestations hindering the regeneration of beetlekilled forests.

Insecticides are effective in killing beetles and saving infested trees. However, besides the negative effects of widespread application, the cost of chemical treatments is prohibitive. Current forest management focuses primarily on removing dead standing and fallen timber to reduce fire danger.

'We have removed dead timber on Monarch Pass and on and near the power line corridors," Medina said. "We have created fuel breaks near Pitkin, and we have plans to treat areas in Taylor Park around subdivisions.

(Paul Wayne Foreman can be reached at paul@gunnisontimes.com.)

# Building codes Jansen said.

want to push their own building community toward greener practices.

The International Code Council, which develops the standards used in most jurisdictions throughout the U.S., publishes updated building codes every three years. City staff, presently using the 2015 codes, are looking to adopt the 2021 editions of the ICC, tailoring the code with amendments to meet the specific needs of the city, as well as local builders. Some of the proposed changes go "above code" and are primarily centered on increasing energy efficiencies - designed to incrementally move the city closer to some of the goals outlined in its sustainability plan.

Rather than shifting to allelectric construction immediately, staff are instead proposing a "path toward electrification," said Building Official Eric Jansen.

"We are trying to follow suit with some of the goals that were outlined in that plan and not have it all just be a wish list,"

Staff hope to solicit and review public feedback and suggestions before the adoption of the new 2021 building codes. A public comment period will be open for the entire month of August before a draft ordinance is presented to city council on Oct. 11. Staff expect to adopt the ordinances before November, and the changes will go into effect on Ian. 1, 2023.

Compared to Crested Butte, which went far "above code" standards, the City of Gunnison is taking a more conservative approach and is instead proposing electric and solar "ready" homes. If approved, new construction will have the means to easily switch from natural gas to electric appliances, avoiding expensive retrofitting to accommodate new electric appliances. Homes will be required to have space for solar panel installation, pathways for connections and structurally capable roofing. Council is also considering implementing an electric vehicle-ready standard so homes are built with enough electric capacity to plug in.

The code will also require a "mileage sticker," a certificate that lists the different energy efficiencies of the appliances within the building as well as the performance of the building's windows and walls. Jansen said the sticker will memorialize the construction techniques used at the time and gives the future owners some peace of mind or knowledge if they have to replace something.

But contractors are always looking at the bottom line; the rising cost to build. The City of Gunnison hosted two open houses on Aug. 11 to answer questions and to collect feedback directly from local build-

"Someone said death by 1,000 cuts - a little bit of this costs more, a little bit of that costs more - it all adds up." Jansen said. "You will pay a little bit more upfront, but the benefits far outweighs the losses down the road when you're saving energy and have an efficient, comfortable place to live that doesn't kill you on utility

Local contractor Chris Klein has been building in the Gunnison Valley for 25 years. Although he said he is in favor of adopting the 2021 codes, he emphasized the need for his clients to have options, especially as housing costs continually

"Every time that we pass more regulations, there's more cost to it." Klein said. "And ultimately that makes it that much less affordable for the service industry in this valley ... it hurts the lower income brackets the

Electricity is also still more expensive than gas, he said.

This vision of everybody having free or cheap electricity in the future may be possible, but so far the economics of it don't work that way," Klein said.

Cillian Liam Barrett, owner of Hearth Design Build and construction manager for Habitat for Humanity, disagreed. He said code adoption cost is miniscule compared to the recent general material cost increases and property value inflation. He said he is optimistic the city will encourage conversations between builders and designers as it drafts the code changes.

"I'm hopeful that we'll come together in the next few months to figure out locally appropriate ways to navigate these new codes and that we can form a

professional initiative to create best practices - which is not code," Barrett said. "Code just says this is the way it has to be, not how you do it. Otherwise we will have 100 builders in the valley all coming up with different solutions on their own, which is not affordable. We need to share information and processes to strengthen our industry."

The City of Gunnison, which generally updates its building codes every six vears, is also considering moving to a three-year code revision cycle. According to Jansen, a lot can be missed within that time frame including technological advancements, building science improvements and energy efficiency upgrades - with the hope more regular updates will ultimately reduce the burden on the building community.

Questions and comments can be submitted to Eric Jansen at ejansen@gunnisonco.gov.

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

# OUOTE of the week

"All we need to say is what is true and right. Bullying is prohibited against any student for any reason."

> - Dave Taylor

See story on A10

#### **BRIEFS**

#### Inflation Reduction Act funds drought mitigation effort

On Aug. 16, President Joe Biden signed the landmark Inflation Reduction Act into law, meant to reduce health care costs and reduce greenhouse gas emissions.

Looking to the water crisis facing much of the western U.S., the law dedicates \$8.3 billion toward addressing water and drought challenges by investing water and power infrastructure and rebuilding existing projects to withstand the changing climate. The act also includes \$4 billion specifically for water management and conservation efforts in the Colorado River Basin and other areas experiencing severe drought.

"The Biden-Harris administration is taking an all-of-government approach to mitigating the drought, and the Interior Department is committed to using every resource available to conserve water and ensure that irrigators, Tribes and adjoining communities receive adequate assistance and support to build resilient communities and protect our water supplies," Deputy Secretary Tommy Beaudreau told the Bureau of Reclamation in a press release.

## Blue Mesa inflow

The Bureau of Reclamation announced that unregulated inflow into Blue Mesa Reservoir from April-July this year reached 68% of average at 430,000 acre feet. The reservoir is currently 43% full at an elevation of 7,458 feet. Inflow as of Aug. 11 was 900 cubic feet per second, while outflow was 1,550 cfs. Peak flow occurred on May 19.

#### Correction

The article titled "County hit by cyber fraud" in the Aug. 4 edition of the Times reported from an internal county memo that a fake invoice was forwarded for processing to County Accountant John Nehls by Senior Accountant Agnes Kroneraff. The memo was in error, and the invoice was forwarded by former Chief Financial Officer Juan Guerrera.

#### **OBITUARIES**

# Mark Templeton



Mark Wayne Templeton passed away quietly at his home with his wife Shary, in Gunnison, Colorado on June 17, 2022, after a 3-year valiant journey with esophageal cancer. We would like to send out a hearty thanks to Home Health and Hospice for all their help in his final challenging weeks.

Mark was born in Pueblo, Colorado on Feb.12, 1955 to Faye Evelyn Failing (1991) and Doyle Wayne Templeton (2022). His Mom brought two boys into the family, Eugene and Mervin Ormiston and added brother and sister Keith and Debora Templeton. The family lived in Canon City until Mark was 10, when they moved to the family ranch near Sargents, Colorado, They attended the Sargents School, which was a two room schoolhouse, still standing today and well used by the community. When that elementary school was closed Mark was bussed to Gunnison.

The kids had many ranch chores and milked about 10 cows before and after school. They could not get TV which was in a way, a big blessing. Evenings were filled with a variety of board games, cribbage, poker and chess. Mark's dad decided to teach all the kids

(970) 209-4479

CLARKE AGENCY REAL ESTATE 241 N. Main St. Gunnison, CO 81230 Office: (970) 641-0511 www.clarkeagency.net

to play chess when Mark was about seven. They held chess tournaments which Mark won often, leaving him with a lifelong love of the game. Later, the son of the Dean of the college played him and they could never figure out how a rancher boy from Sargents could be so good at chess. As an adult, Mark would play Lud Stromeyer, a good friend and Art professor at Western, Byron Russell, who was an artist and a fine athlete at WSC (later renamed Western Colorado University), was Mark's chess partner for 10 years. Every Thursday night Byron mostly won all three games, But, sometimes Mark could win one and once only, won two of those weekly games.

In sixth grade Mark joined band, played the clarinet and made first chair second clarinet in high school. Miss Pluess, the band director, convinced Mark to go to drum major camp in Santa Barbara California. He worked all summer and paid for the plane tickets and the school all on his own.

Meeting Shary Maben Russell up Indian Creek at Homestake Mine, on May 20, 1979 changed both of their lives forever. Inseparable ever since, Mark and Shary married in 1985. Together they raised Hattie and Leona Russell. Those girls took Colorado Track and Field by storm, helping Gunnison High School win two back to back Colorado State Championships in 1991 and 1992. Both of them received full college scholarships in track. Two beautiful sous came along, Joseph and Daniel. Whether it was being on the road for endless athletic events, as all the kids competed, throwing blue streaks in the front yard, spring training at Char Mar Park or sledging at the college bowl, they had a good

As a non-traditional student Mark graduated from Western State College, Cum Laude in 1988, with a geology degree. He was the first person in his family to go to college. They used to tease him about having "college

knowledge." But with Shary's encouragement he excelled at higher education and was proud of his science degree.

Mark started working for Gunnison County in 1981 as a part-time assistant building inspector and county sanitarian. He worked in several other departments and ended his 40-year tenure in early 2021 as a utility manager for public works. He loved working for Gunnison County and was a credit to this local government. He was appointed by the commissioners and served on the Gunnison Cemetery Board for the last eight years.

Mark was a motorcycle rider. His dad bought a Cushman 12-horse tot-goat that could "climb up a tree." They used to race his mom's Harley Davidson 90cc. They would race up Dawson Creek turning on a dime, to see who had the fastest time. He said one of the best vacations was when he rode his Honda Shadow to Dead Wood. South Dakota with Sharv driving the support vehicle keeping all the road rager's from driving up on him. He led the 800 miles, riding free across the prairie. They were able to make that trip twice. He rode dirt bikes with family and friends on single tracks all over Gunnison County and documented those high mountain passes with hundreds of photos. He rode 120 miles of the White Rim in Moab, Utah every year, often with his sons. The last time, he was very sick, but he still did most of that awesome ride. As our friend luan Garcia says, "Mark was a war-

Mark loved to hunt deer and elk around the family ranch on Dawson Ridge and in Swag Gulch. He always got at least a deer and it was nice to have meat in the freezer, especially raising a family.

While in college, Mark became a whitewater rafter and rafted some serious class-four whitewater in his lifetime. His first trip, in his Achilles 15' raft, was down Brown's Canyon on the Arkansas River, at 6,500 c.f.s.

Today they close the river at that level. Professor Wark invited several boatmen to raft that day. While scouting the river at Ruby Mountain, Mark told Shary that Hattie and Leona should stay behind until he checked it out. They were really disappointed. But, it was a wild run with boats flipping, Mark getting sucked off his boat, Dickerson's brother went swimming twice and when they all returned to the campground at dusk, everyone was glad that no one had been hurt and they lived to tell the

Mark was a great poker player. He hosted a home game for over a decade, followed by playing with a group of guys at Mike Wilson's until Mike passed away. He played online and in casinos. He won a \$2,000 Tag Hauer, Swiss watch, out in San Diego, California, one time winning enough to pay for the entire vacation, including plane flight. As a lifetime learner, Mark is donating his extensive collection of No Limit Texas Hold'em books to the Gunnison Library, "in the hope that some local person will compete at that higher level," the World Series of Poker in Las Vegas.

Mark is preceded in death by his brother Eugene Ormiston, father Doyle Templeton (2022), mother Faye Failing Templeton (1991) and all grandparents. Mark leaves behind his wife Shary, sons Joseph Templeton, Daniel Templeton (Julie) and daughters Leona Spracklin (Patrick) and Hattie DuBois (Jerry). He also is survived by brothers Keith Templeton, Mervin Ormiston (Nita) and sister Debora Lynch.

Mark could be ornery and hardheaded, but he was also smart, generous, a hard worker and fun. Some of Mark's last words were "be kinder to everyone. Do a good deed without recognition. If you can help one person, even slightly, to get a leg up, do it."

We love you Mark and you will be missed. You made your 'mark', now rest in peace, your work here is done.



## **NEW LISTING** Come visit this 3 bdrm/2

bath over 1,700sf house in lower Castle Mountain on 1.5 acres! Large south facing sunroom, spacious west facing deck for outdoor dinners, open kitchen & dining room. 403 Sierra Vista Way: \$625,000.



& cozy 3 bdrm/2 bath. 1 824sf home with main 1.824st home with man floor office or guest area. Custom owner designed with Douglas fir handrail, window & baseboard trim, maple kitchen cabinets, large outhern windows tor passive solar & stained concrete floors downstairs, 210 S.



NEW LISTING Big valley views from this 4 bdrm/3 bath. 2,788sf home on 4,7 acres with loafing shed & corral, Lovely open kitchen, office off the mudroom, main floor master suite. Downstairs features 3 bedrooms, bath, living room, wood stove & bonus space for

LAND FOR SALE Very nice lot in the town of White Pine, CO, White Pine has rich Colorado history known for Coat and Silver Mines, This s a great location to build your dream cabin or park your RV. 9900 County Road 888: \$25,000. PHENOMENAL VIEWS from every window

HOME ON 50 ACRES in Ohio City features HOME ON 50 ACRES in Onto Liny features an excellent mixture of wildlife, nearby trails, aspen, pines & 300 feet of Gold Creek frontage, 3 bdmn/2 bath house, huge attached garage, large detached barn, touched by Forest Service lands, 5498 County Road 771; \$1,750,000.

4 BDRM/2 1/2 BATH CUSTOM HOME situated 4 BDRW2 ½ BATH CUSTOM HOME situated on over 2 acres with views of the Anthracites & Carbon Peak. Spacious 3.315sl with sunroom. oak flooring throughout, tile baths, metal roof & new windows. 229 Chippewa Way; \$1,100,000. NEW LISTING A rare opportunity to have property in Dutch Gulch just north of Ohio City. This property has 2 possible building sites on the mining claim. The lower site is heavily treed & the upper site has views to the west overlooking the valley bottom. TBD Dutch Gulch: \$30,000.

GREAT OPPORTUNITY to own a commercial building along with a fun & profitable sporting goods business. Building is 6,468sf with two restrooms, one dressing room, an office and an attached garage bay for storage, 115 W. Georgia Ave. Unit B: \$895,000.

PRICE REDUCED Faptastic 3 bedroom/2 bath home with woodstove, large open kitchen, laundry room & work shed in Pilkin. Built in 2012, great condition, tile entryway, tucked away in the trees. 832 River Street; \$479,000.



PHENOMENAL VIEWS from every window
1,800sf ranch stylic home.
Comformic bount 2 % bath, with
treakfast nock 6 in 100m. Soak
up the views and enjoy 500.
Court own 8 a 3 car garage! 11.43 Sender University

WELL MAINTAINED 3 bdrm/2 1/2 bath nearly

1,700sf home with additional family room & attached 2 car garage features a fully fenced backyard on just over half an acre. 430 Fairway Lane; \$730,000.

# Agreement suspends regional oil, gas leasing



Bella Bu
A Gunnison sage-grouse lek sits on BLM lands in Gunnison County,

# BLM must supplement environmental plan on 2.2 million acres in Colorado

Conservation groups and the U.S. Bureau of Land Management have finalized a legal agreement that will prevent new oil and gas leasing across 2.2 million acres of southwestern Colorado until the agency supplements its environmental analysis and releases an amended plan for lands in the area.

The agreement requires the BLM to analyze potential harms to the climate from fossil fuel extraction in the Uncompahgre Field Office planning area and to evaluate at least one alternative that reduces oil and gas leasing. This revision process for the Uncompahgre resource management plan is expected to take two years.

Refore revising the plan, the agency also must complete a separate regional plan to conserve critically imperiled Gunnison sage-grouse, an effort the BLM started last month, and another plan to promote conservation of big game corridors and important big game habitat on more than 20 million acres of public lands in Colorado, also announced in July.

The agreement resolves a lawsuit filed in 2020 by the conservation groups challenging the Bureau's refusal to analyze climate damage and harm to the threatened sage grouse from fossil fuel development and the agency's failure to consider a management alternative that allows for no new fossil fuel leasing.

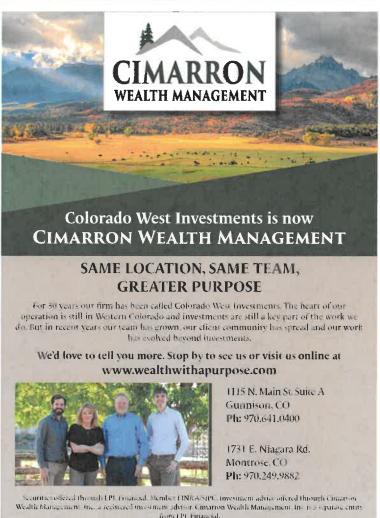
The Uncompabgre resource management plan is a 20-year blueprint for management of the subject lands. The contested plan would have allowed fracking on more than half of the public land and federal mineral estate included in the 3.1 million-acre planning area, would have opened 95% of the nineral estate underlying BLM surface lands to oil and gas development and would have allowed coal extraction on another 371.000 acres.

The region spans the northwestern San Juan Mountains, several rivers, the towns of Ouray, Telluride, Montrose and Paonia, and the North Fork Valley, whose organic food growers and communities have opposed oil and gas development. It also includes numerous threatened and endangered species, including the razorback sucker, Colorado pikeminnow and Gunnison sage-grouse.

"Gunnison sage-grouse depend on healthy public lands, and healthy public lands are incompatible with expanding fossil fuel development," said Matt Reed, public lands director with Gunnison County-based High Country Conservation Advocates. "We're grateful that the communities, wildlife and waters that are sustained by this landscape will benefit from this agreement."

(Source: Western Environmental Law Center)





\$1.00 Vol. 141. No. 31 Thursday, August 11, 2022

# A reservoir of green

Water sampling and satellite imagery produce a more complete story of algal blooms at Blue Mesa

Bella Biondini

With a roar of the engine

With a roar of the engine, the boat skimmed across the top of Blue Mesa Reservoir, leaving Elk Creek Marina behind as it gently wound through the wide can-



Algae A6 NPS Aquatic Ecologist Nicki Gibney and technician Bridget Goddard cruise to their sample spot on Blue Mesa

Bella Brandin.

# **INSIDE** TODAY

**NEWS:** City celebrates completion of wastewater treatment plant, **A10** 

COMMUNITY: Women in woodworking, **B1** 



SPORTS: Stingrays come out on top at state, **B11** 



SPORTS B9
OPINION A4
CLASSIFIEDS A14-A17
OBITUARIES A2

ONLINE GUNNISONTIMES.COM

# School board unanimously approves bond initiative

Bus and food service still struggling in Crested Butte

Bella Biondini

Times Associate Eartor

On Tuesday, the Gunnison Watershed School District Board unanimously voted to proceed with asking voters to approve a \$95 million bond measure this fall to fund district-wide improvements that include addressing overcrowding at the Crested Butte Community School (CBCS) and creating better security systems at all schools.

Before the vote, Superintendent Leslie Nichols gave the board and the community an overview of the project.

The bond proposal includes funding for projects at all of the district's schools — Lake Preschool, Crested Butte and Gunnison Community Schools, Gunnison High School and Marble Charter School - placing priority on safety improvements, relieving overcrowding in the North Valley and building maintenance. About 42% of the total cost is for Gunnison schools, while the 58% is for adding 13 classrooms at CBCS. If passed, the bond would cost residential property owners approximately \$183 per year or \$15 each month for every \$500,000 of assessed value.

The \$95 million price tag, which has increased by \$6 million since July to account for rising interest rates, reflects reductions in the project's scope,

School board A8

# **Drought eases in Gunnison County**



Elk Creek Marina stayed closed in 2022 due to low water levels.

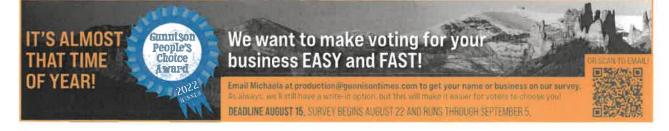
Upper Colorado Basin states respond to federal call for water cuts

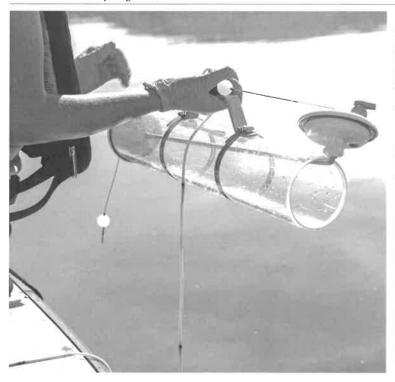
Alan Wartes

Better than expected monsoonal rains this summer have not led Gunnison County out of the region's persistent drought — but the moisture has gone a long way to lessen its severity. Beverly Richards, water resource specialist for the Upper Gunnison River Water Conservancy District, shared the message with the Gunnison County Commissioners on Tuesday.

As of last week, over 96% of Gunnison County was listed in the National Integrated Drought

Water update A8





Bridget Goddard prepares to lower the Van Dorn, a tool used to collect water samples, into Blue Mesa.



Seen from space, algal blooms in Blue Mesa reach their maximum extent on Aug. 29, 2021.

# Algae

from A1

yons and out into the open water. At first glance, the water appeared a deep blue, glassy and reflecting the clouds above. But a closer look revealed that the reservoir was actually green, choked with algae blooms that had been worsening as the summer sun baked the basin.

Blue Mesa Reservoir, a magnet for anglers and boaters alike, is the central subject of a collaborative three-year water sampling project involving the National Park Service (NPS), the agency that oversees Curecanti National Recreation Area, and the U.S. Geological Survey (USGS). In 2022, the project entered its second year and garnered additional financial support locally from Gunnison County as well as the Upper Gunnison River Water Conservancy District and the Uncompangre Valley Water Users Association. That allowed the team to increase

water sampling — a greater frequency making it easier to catch unexpected toxic blooms and warn the community.

The study combines data collected directly from reservoir sampling with satellite imagery captured from above with the hope of unearthing the mystery of exactly which factors trigger toxic blooms. Over the course of 2022, the team will collect samples 17 times from May through October, and conduct toxin sampling separately on a weekly basis. The samples go on a short drive up the road to Curecanti's lab where they are properly packaged and sent off to the USGS National Water Quality Laboratory in Denver.

A toxic bloom often turns the water an unnatural turquoise color, almost like spilled paint, compared to the dark blue lake water. Katie Walton-Day, a research hydrologist for the USGS, said the project team is trying to look for patterns that lead up to a toxic bloom by measur-

ing pH, temperature, dissolved oxygen and nutrient concentrations in the reservoir.

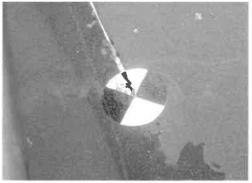
"That's the magic formula everyone is trying to figure out," Walton-Day said.

#### A perfect cocktail

Gear In tow, NPS Aquatic Ecologist Nicki Gibney, Hydrologic Technician Bridget Goddard and USGS Hydrologist Rachel Gidley traveled to Iola Basin, the easternmost section of the reservoir, to take samples on Aug. 4. Iola's shallow water is quick to heat during the late summer, making it optimal for plant growth. It is often the birthplace of the algal blooms that plague the system, dispersing throughout the rest of the reservoir.

The boat's depth finder revealed a depth of 17 feet, merely a puddle compared to the Cebolla Basin to the west, nearly six times as deep in spots. With a click of a button, a data sonde, a device used to record pH, temperature and oxygen conductivity, took





fielu Roneni

The crew slowly lowers a Secchi disc into the reservoir to measure the water's transparency. In May and June the disk remained visible for nearly 15 feet, almost all the way to Iola's bottom. On Aug. 4, it was only lowered 6.5 feet before it disappeared.

measurements each meter it sank, all the way to the muddy bottom. The water temperature was a balmy 70 degrees on the water's surface, which swirled with green.

After slipping on gloves to avoid contamination, Goddard hoisted a Van Dorn, a clear cylindrical water sampler, over the side with a splash. The special bottle collects about a gallon of water from each point - the samples labeled as Iola surface, Iola mid and Iola deep. Small green flecks floated in the tube, some like tiny clippings of grass and others circular, different types of cyanobacteria or blue-green algae: gloeotrichia and aphanizomenon.

The species are just two out of a dozen that the team has begun to identify. In the right conditions, which are still unknown, the cyanobacteria can produce cyanotoxins, especially in some of Blue Mesa's coves where the algae can build up like thick mats. Even when the water cools, some species are able to go dormant and live in the mud when the lake freezes over in the winter.

"We don't know which ones are producing toxins when, and they are probably producing different types of toxins, and so that's part of what we are still learning." Gibney said.

are still learning," Gibney said.
According to Gibney, bright blooms are starting to appear in little spots across the reservoir. Although the color is not an indicator that the bloom is toxic, it's best to avoid areas that are turquoise, she said. If people come in contact with the toxins, symptoms can range from rashes, nausea and diarrhea. In extreme cases, dogs in particular can experience seizures and death, usually within 24 hours of expo-

sure, from drinking the water and licking it off of their fur.

Sampling at different depths allows scientists to study how nutrients such as nitrogen and phosphorus enter Blue Mesa from the surrounding lands and what is available for algae to consume. The researchers also set aside little brown bottles to measure chlorophyll levels, helping them understand the density of the blooms.

"It looks like just the right cocktail of nutrients," Gibney said, looking at the green water over the side of the boat.

#### Painting a picture from above

With a small camera, she snapped some quick photos of the green particles floating around in the tube. The photos will become a tool later on, paired with the satellite images taken from the sky.

The satellite passes over every five to seven days at noon, requiring the surface samples be taken within a two-hour window. This allows experts to use the imagery to show where the highest concentrations of algae are and to eventually reveal the dominant species out in the water.

The satellite has been taking images of Blue Mesa long before the monitoring project began.

began.
Tyler King, a USGS hydrologist, is tasked with identifying relationships between the satellite images and what the team observes on the ground. In addition to collecting current conditions, the satellite database allows King to "hind-cast" and look back at the historic satellite image record to try and piece together what was going on when blooms were present in the reservoir, he said



Katie Walton-Day, a research hydrologist for the USGS, prepares to filter algae out of the water sample. The samples are wrapped in foil and put in the freezer before they travel to a lab in Denver for processing.



Algae collects on a filter. The door and shades in the room were closed while the team prepared samples to prevent the algae from continuing to grow.

King not only looks for how green the water appears, but also the spatial patterns that can occur, revealing the bloom's movement through the reservoir during a particular time period.

The data is generated by a European space agency satellite called Sentinel-2, designed to monitor environmental conditions on earth. It produces a new image of Blue Mesa, along with every other water body on the planet, every five days. King said numerous satellites developed for similar work are focused largely on monitoring red tides along the coast and algal blooms in the Great Lakes.

"We're kind of trying to do something similar with a satellite that's not purpose-built for this, but it shows promise that you can indeed pick out algal blooms," King said.

The study will conclude in 2023, followed by the major report writing which will piece the data together. Researchers hope the final results will give the community a better idea of how to predict and manage blooms within Blue Mesa Reservoir.

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







A HUGE thank you to our event sponsors!

Mountain-lome

**Blake Hawk Family** 

**Channing Boucher** 

Finance charges accrue from date of financing, Must finance with GM Financial. Some customers may not qualify, Down payment required at signing, if applicable, Not available in PA or TX unless combined with a 0.00% APR. Offer not available in FL Not available with lease and some other offers. Take new retail delivery by 8/31/22.\* Must finance with GM Financial. Some customers may not qualify. Length of contract limited. Not available with lease and some other offers. Take new retail delivery by 8/31/22.

# Water update

Information System as falling in the category of "moderate drought," one step above the least severe rating of "abnormally dry." The 30-day outlook calls for continued improvement, as forecasts predict at least a 33% chance of above normal precipitation in the next month.

Richards said the wetterthan-forecasted summer has done little to improve the water storage outlook at Blue Mesa Reservoir, however,

Current forecasts call for the lake to drop to 33% of capacity heading into winter, up only slightly from the 29% estimate in early summer. The water level in the reservoir peaked at 48% in July and sits at 44% of capac-

"Even though we've had all this monsoon, quite frankly, I don't think a whole lot of the water got into the streams." Richards said. "That's because the soil was so dry. A lot of (the moisture) was depleted that way!

#### Upper Basin plan

On June 14, Bureau of Reclamation Commissioner Camille Touton spoke at a hearing convened by the U.S. Senate on drought conditions in the West.

"The challenges we are seeing today are unlike anything we've seen in our history," she told lawmakers. In particular, Touton pointed to critically low water levels at Lake Powell and Lake Mead, currently at approximately 26% and 27% capacity.

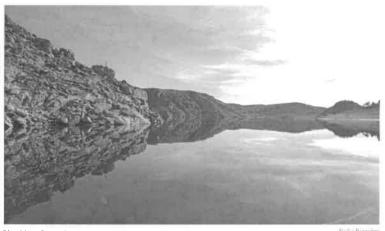
Touton called on Colorado River Basin states - Colorado, Utah, Wyoming, New Mexico, Arizona, Nevada and California — to come up with a plan to reduce water use by 2-4 million acre-feet in 2023, to protect levels in the reservoirs. She gave the states 60 days - or until Aug. 16 — to comply or the federal government would step in on its own.

Under the Colorado River Compact, signed in 1922, states are grouped into upper and lower basin "divisions." The Upper Colorado River Commission represents the four Upper Basin states, Colorado, Utah, Wyoming and New Mexico. On July 18, the Commission sent a letter to Touton delivering the Upper Basin plan for reaching her target reductions.

The letter outlines a 5-step proposal centered on drought response and demand management program development and implementation and a continuation of current "water management and administration within the available annual water supply within the Upper Division States."

"We intend to implement the 5 Point Plan to the extent it is effective, in conjunction with plans developed for the Lower Basin." the letter states.

The letter repeats what Upper Basin States have consistently maintained - that the bulk of



Blue Mesa Reservior on Aug. 4, 2022

the reductions must be undertaken by the Lower Basin states.

"To be blunt, it's because we have a structural imbalance," Upper Gunnison General Counsel John McClow told commissioners on Tuesday. The lower basin has been consuming more water than there is, and it finally caught up with us. We can't recover in dry years like '22, and what's anticipated in '23, the system just doesn't have enough water anymore. So you will notice if you look at this letter, we do point out to the commissioner that we have very limited ability to make a contribution because, we are at the mercy of the hydrology."

According to McClow, Lower Basin states have yet to submit a plan of their own to Reclamation, but that they are considering a program to compensate agricultural users for reductions at a proposed rate of \$1,500 per acre-foot. That would require up to \$2 billion dollars for one year.

The Inflation Reduction Act passed by the U.S. Senate last weekend contains a provision for up to \$4 billion in drought mitigation funding for all Colorado River states, which could be tapped to help pay for the program. The money is available only until fall 2026.

"If the program costs \$2 billion for one year, that's not going to last," McClow said.

Should the federal government step in unilaterally to address the crisis, McClow acknowledged that it has author-

ity to dictate reductions to Lower Basin states, but the legal picture is unclear regarding what cuts Upper Basin states could be forced to take

"Whether the Secretary (of the Interior) has any authority to do anything to enforce a reduction in consumptive use in the upper basin is questionable," he said. "All of the federal projects have their attorneys scouring their contractual arrangements to see what authority the Secretary has. The Attorney General's Office is reviewing all of those contracts, including ours."

(Alan Wartes can be contacted at 970.641.1414 or publisher@gunnisontimes.com.)

# School Board

from A1

taking into account community feedback gathered last year.

Treasurer Dave Taylor said he sees "nothing controversial" in the board putting the ballot before the voter again.

"We've done our planning, now the voter, who's going to pay the bill, gets their chance to weigh in on the situation without me opining on for, against or what adjustments we can make," he said. "We've put some hard work into this and the voter deserves the right to weigh in."

In addition to upgrading school entryways to the industry standard, Nichols displayed a snapshot of growth at the Crested Butte Community School over the last 20 years, which has more than doubled from 347 in 2001 to almost 800. While the average growth in Gunnison has moved at a slower pace, she said the district is behind in providing capacity for science, technology, art, engineering and math (STEAM) programs, as well as vocational education.

Every 10-15 years, the district has approached taxpayers regarding a bond initiative. The school district has not passed a bond since 2008, when the board asked for \$45 million to complete a significant renovation at Gunnison High School as well as additions to the Crested Butte school, According to Nichols, the 2022 bond will address the district's anticipated needs for the next decade.

Looking at the inflation rates on essentials such as groceries and gas, resident Neil Watko. who has two grandchildren entering the school system, suggested splitting the project into two separate bond issues — one that addresses safety, and a second for the remaining capital improvements.

. We cannot ask for another vear and risk the safety and security of our students, faculty and administrators," Watko said. "How can passage be guaranteed?"

Brian Pugh, a member of the bond steering committee and parent of two students at CBCS, said that although splitting the bond into pieces was considered at the beginning, "these all go hand in hand."

"It's easy to say that maintenance is optional and that we could do it later," Pugh said. But anyone who's ever lived in a home, rented or owned, knows if you put off maintenance, especially critical maintenance, it costs real money and lways costs more!

If the voters approve the ballot in November, projects would begin in 2023 and are expected to be complete by 2025. To learn more about bond initiatives, visit gwsdschools.com.

#### Update on buses and food service

The beginning of the school year is less than two weeks

away, with the first day set for Monday, Aug. 22. Nichols provided the board with an update on bus and food service within the district, which has continued to grapple with staff shortages over the past year.

In Crested Butte, the district was only able to provide an emergency meals program last year because it lacked a kitchen manager. It instead relied on a couple of part time employees to serve students on free and reduced lunch. In Gunnison, kitchens at all schools were fully staffed and served full USDA approved menus.

Due to COVID, the district has been able to offer students free meals for the past two years. According to Nichols,

the federal government did not extend its financial support for school meals, returning the district to "normal operations for parents and families, and that's paying for lunch."

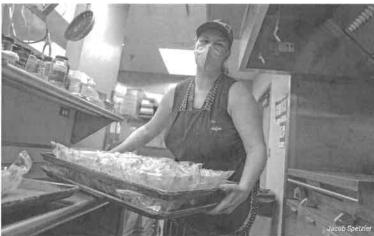
During the break, CBCS lost more kitchen employees and will start the year with four fulltime staff instead of the board's hope for seven. Staff plans to continue recruitment into the school year.

"At this point, it's a skeleton crew, but we are planning to offer a USDA meal program in Crested Butte," Nichols said.

With bus service, things have gotten "worse over the summer, instead of better," she said. Last year the district was running one bus in Crested Butte out of four desired routes with two part-time drivers. One has since taken another full time job and the other has retired -. Bill Kastning will keep driving activities and athletics, but not a regular route. In Gunnison, the district is able to run six routes out of seven with only four fulltime drivers.

"We have worked hard to see

if we might be able to shift any of those drivers up to Crested Butte ... If I take drivers who like their job because of where they get to go to work and the routes they drive and say you must go drive 30 miles away from here, I might end up with no drivers," Nichols said. "It's a fine line and a hard balance to (Bella Biondini can be con-



Kat Harrington, pictured above, and Jennifer Valle were the only two employees operating the CBCS kitchen in

tacted at 970.641.1414 or bella@ gunnisontimes.com.

### GUNNISON COUNTRY TIMES

970.641.1414

© 2022 Gunnison Country Times

Publisher/Editor/Owner Alan Wartes publisher@gunnisontimes.com

Office Manager/ Special Publication Editor Enid Holden enid@gunnisontimes.com

Associate Editor: Bella Biondini bella@gunnisontimes.com

Photo and Sports Editor Jacob Spetzler jacob@gunnisontimes.com

Times Staff Writer Paul Wayne Foreman paul@gunnisontimes.com

Times Staff Writer Mara Taylor-Heine mara@gunnisontimes.com

Sales Director
Bobbie Duft
bobbie@gunnisontimes.com

Sales Representative Jack Anderson jack@gunnisontimes.com

Production Manager Michaela Keefe production@qunnisontimes.com

Production/ Social Media Manager Libby Marsden libbv@gunnisontimes.com

Distribution

THE GUNNISON COUNTRY TIMES
(ISSN 0892-1113) is published weekly
by Alan Wartes Media LLC.,
128 N. Wisconsin St., Gunnison,
Colorado 81230. Periodical postage paid
at Gunnison, Colorado. POSTMASTER:
Send address changes to:
The Gunnison Country Times,
218 N. Wisconsin,
Gunnison, CO 81230-0240

Hours: 9 a.m. - 5 p.m. Monday through Friday





# **OPINION**

# Hard choices for the Colorado River

Mark Squillace and Quinn Harper Writers on the Range

The seven Colorado River states — Arizona, California, Colorado, New Mexico, Nevada, Utah and Wyoming — face a daunting mid-August deadline. The federal government has asked them to come up with a plan to reduce their combined water usage from the Colorado River by up to four million acrefeet in 2023.

That is a massive reduction for a river system that currently produces about 12.4 million acrefeet. The Bureau of Reclamation, which manages the Colorado River, warned that it will "act unilaterally to protect the system" if the states cannot come up with an adequate plan on their own.

The seven states have worked cooperatively over the past two decades to identify solutions to a shrinking river. But their response now, much like the global response to climate change, seems far from adequate to the enormous challenge.

In a recent letter to the BOR, the Upper Colorado River Commission, speaking for the four Upper Basin states, proposed a plan that adopts a business-as-usual "drought-reduction" approach. They argue that their options are limited because "previous drought response

actions are depleting upstream storage by 661,000 feet."

The Commission complains that water users "already suffer chronic shortages under current conditions resulting in uncompensated priority administration, which includes cuts to numerous present perfected rights in each of our states."

This leads the commission to conclude that any future reductions must come largely from Mexico and the Lower Basin states of Arizona, California and Nevada, because they use most of the water.

But the Lower Basin states have already taken a significant hit to their "present perfected rights," and if the BOR makes good on its promise to act unilaterally, they will face another big reduction. The cooperative relationship among the basin states will not endure if the Upper Basin refuses to share the burden by reducing its consumption.

A good place to start might lie with two Colorado projects to divert water from the Colorado River basin to the Front Range. Both began construction this summer. The Gross Reservoir Expansion Project will triple the size of one of Denver Water's major storage units. Denver Water's original justification for this project — to serve Denver's growing urban population — seems odd given that water demand in their service area over

the past two decades has shrunk, even as its population rose by nearly 300,000.

Similar questions have been raised with the Northern Colorado Water Conservancy District's Windy Gap Firming Project, which plans to store Colorado River water to support population growth in Front Range cities.

These two projects suggest that Colorado is prepared to exacerbate the current crisis when the opposite response is so desperately needed.

Abandoning these two projects would signal that Colorado is serious about giving the Colorado River a fighting chance at survival. It might also jump-start good-faith negotiations over how Mexico, the states and tribes might work to achieve a long-term solution to this crisis.

The homestead laws of the 19th century attracted a resilient group of farmers to the West who cleverly designed water laws to secure their water rights against all future water users. "First in time, first in right" became the governing mantra of water allocation, because, except for tribal nations, the farmers were first.

That system worked well for many years. As communities grew, cities and water districts built reservoirs to store the spring runoff, ensuring that water was available throughout the irrigation season.

Climate change and megadroughts have upended that system. Nowhere have the consequences been as dire as in the Colorado River Basin. America's two largest reservoirs, Lake Powell and Lake Mead — key components of the Colorado River's water storage system — have not filled for more than two decades. They now sit well below 30% of their capacity.

Hotter temperatures, less mountain snowpack and dry soils that soak up runoff like a sponge have brought us to this sevenstate crisis. All seven states must now share the pain of addressing this crisis.

The Upper Basin Commission's anemic response to the BOR plea is not a serious plan. We can do better and we must.

(Mark Squillace and Quinn Harper are contributors to Writers on the Range, an independent nonprofit dedicated to spurring lively conversation about the West. Mark Squillace is the Raphael J. Moses professor of natural resources law at the University of Colorado Law School. Quinn Harper is a graduate student pursuing a master's degree in natural resource policy at the University of Colorado, Boulder.)

# The Colorado comes to life as it ebbs

Char Miller Writers on the Range

The Colorado River is revealing its secrets. For decades, a World War II landing craft lay submerged 200 feet beneath Lake Mead's surface — but now it's beached, rusting in the sun. It's become an unsettling marker of just how vulnerable the river is and how parched the Intermountain West has become.

The immediate impact of what's being called the most severe mega-drought in 1,200 years, has been sharp cuts in the allocation of water to downstream users, with southern Nevada's take slashed by 7 billion gallons. Then there's the fear that if Lake Mead's water levels continue to fall, it may not be able to generate the power it now supplies to 1.3 million people in Nevada, Arizona and California.

Yet the diminished reservoirs tell another tale about the Colorado River, one of the world's great plumbing systems, which enables downstream agriculture and sends potable water to an estimated 40 million residents. The story is that just where the river ends, at the Gulf of California, it has been slowly coming alive.

For decades, the U.S. sucked

so much water from the Colorado that only a trickle, if that much, ever reached its desiccated, sprawling delta in Mexico. Once covering 9,650 square miles, the delta has shrunk to less than one percent of its original expanse. Human diversions wrung it dry.

It wasn't always that way. In 1922, conservationist Aldo Leopold wrote about paddling a canoe through the delta's green lagoons and marveling as "cormorants drove their black prows in quest of skittering mullets" and "mallards, widgeons, and teal sprang skyward in alarm." When a troop of egrets settled on a far green willow, Leopold said they looked like a "premature snowstorm."

Leopold's lyrical vision had the misfortune a century ago of coinciding with the signing of the Colorado Compact, which sealed the delta's fate. Approved by Wyoming, Colorado, Utah, New Mexico, Nevada, Arizona and California, the compact quantified the Colorado's annual flow and set up the seven states to contend with one another to protect, if not expand, their individual shares. The compact turned the delta into a dust bowl.

For decades, environmental and tribal activists and nonprofit organizations protested the devastation that massive diversions to fill the Powell and Mead reservoirs produced in the delta's once-flourishing human and biological communities. They pushed hard for remedies from both the U.S. and Mexican governments and the river-hugging state legislatures.

It wasn't until 1993, when Bruce Babbitt became Secretary of the Interior under President Bill Clinton, that the political dynamic changed. Babbitt argued that the states must demonstrate how they intended to operate within their apportioned amount. If they failed to do so, he said, he would not approve surplus water, a threat particularly aimed at California, which routinely commandeered any surplus flow the other states didn't use.

River activists immediately demanded that some of the water savings should head down to the delta. They got nowhere until 2014, when Mexico and the U.S. acted on their earlier commitment to sluice more water into the delta's riparian habitats.

Since then, the two countries have periodically released water to mimic historic seasonal flooding. These tiny pulses of liquid energy, which constitute less than 1% of Los Angeles' total annual water con-

sumption, have had an outsized impact.

With restoration ecologists to guide the process, some wetlands have revived, small woodlands have flourished and native plants and animals have taken hold. Remote-sensing cameras recently spotted beavers gnawing on cottonwoods.

We don't know how current drought-management solutions might cripple these recent interventions that brought the tail end of the river to life. Meanwhile, let's recall Leopold visiting the delta where he watched burbling sandhill cranes circling overhead. The sight brought him joy as it made him feel he was joined with them in the "remote vastness of space and time."

That's a compelling affirmation that the Colorado River must be kept alive to its very end.

(Char Miller is a contributor to Writers on the Range, a nonprofit dedicated to spurring lively conversation about the West. He is an environmental historian at Pomona College; his upcoming book is Natural Consequences: Intimate Essays for a Planet in Peril.)

# City celebrates completion of wastewater treatment plant



# New technology allows 35% energy savings

Bella Biondini Time: Associate Editor

On Aug. 4, a small crowd of city council members and project partners cheered as the newly-cut ribbon fell to the ground at the city's recently upgraded wastewater treatment plant, located just west of Gunnison.

According to Public Works Director David Gardner, the old wastewater treatment plant was built in the late 80s and hadn't really been touched since. The \$14 million renovation project incorporated the latest technologies, such as a computerized system that allows staff to turn pumps on and off with the click of a mouse or a smartphone — a major upgrade that makes information about the plant available almost instantaneously and gives staff the ability to address problems quickly.

It also added new and more efficient motors that operate specifically based on the needs of the bacteria that keep the plant running, as well as the state's first permitted UV disinfection system. All together, the upgrades throughout the plant result in energy savings of nearly 35%.

Staff also put a significant amount of funding toward the water testing lab within the plant due to the vast region it serves. The space, now more than triple the size, offers services to campgrounds as far as Grand Mesa, the Rocky Mountain Biological Laboratory in Crested Butte to Creed, Lake City and Sargents and Tincup.

The lab often tests private wells for E. coli and other contaminants and then directs the customer on how to disinfect their well and best management practices. Laboratory Technician Melissa Rogers also notes water hardness and nitrates.

The hold time for a bacteria test is 36 hours, making it difficult for public water systems in the valley that need to test on a routine monthly basis to ship samples out to Denver or Grand Junction.

"Having us right here, an hour at most away, helps them comply with state regulations, as well as makes sure they're providing good clean water to their customers on a routine basis," she said.

All the material passing through the plant is recycled. After treatment, the water returns to the Gunnison River and the solids are turned into Gunny Gold compost. Using a gravity filtration system, the byprodncts from the plant are dried and mixed with wood chips to create a natural fertilizer that is available for retailers, commercial industries as well as community members.

The multi-million dollar project began in the spring of 2020, making it difficult to bring in crews into the country and forcing city staff to get creative and acquire equipment from Germany, said City Manager Russ Forrest before the ribbon was cut. Minus a few pending installations, the renovation is finally complete.

"Somehow we figured it out," Forrest said. "This project came in on budget, and it's successful. It's a beautiful project. I think it will be a model in the state of

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



Great upportunity to own a commercial building is cowntown Gunnison along with a fun and profitable sporting goods business. All Sports Replay has been in business since 1996 and offers new items, conseignment litems, blie repair, full service ski maintenance (base grind, waxing and sharpening) and ice skale sharpening. Building is 6.468 square feet with two restrooms, one dressing room, an office and an attached garage bay for storage. There is a 7 × 8 graage door off the alley for delivenes into one of the extra storage rooms. The ski shop side also has two restrooms. Outside fenced in storage at the back of the building as well.

115 W. Georgia Ave. Unit B • \$895,000





**LUNCH PROVIDED WITH DRINKS!** 26 MEADOW LARK TRAIL, GUNNISON CO MLS #792288 • \$1,275,000

Newest home within highly coveted North Elk Meadows subdivision Custom home is meticulously built and designed from solid cedar including the exterior siding with rock accent.



970.641.4880 129 EAST **TOMICHI AVENUE** 自L MLS

AJ MANI











# THE INFINITY RANCH • CUSTOM LUXURY HOME

271 Seneca Dr., Gunnison | \$1,900,000 | MLS #794352 | 3 BD | 3 BA | 3,138 SQ. FT. | 36.930 ACRES WATER RIGHTS, 22 acres irrigated pasture, year round access, 5 minutes to town. Barn & Indoor Riding Arena, outdoor riding arena & round pen, fencing, outbuildings.



# MATTRESS Sale 8/17 - 9/12



100 SPENCER AVE. GUNNISON, CO 81230 Beautyrest.



## Monarch's fuel reduction projects crisscross landscape

Piles to be torched this winter. snowpack allowing

Paul Wayne Foreman

Bella Biondini Times Associate Edito

Huge swaths of national forest have been turned to tinder from beetle kill and drought, and Monarch Pass was not immune. The U.S. Forest Service, which spends close to \$2 billion per year on fire suppression and containment, has taken steps to mitigate the fuel load and promote regrowth locally, its logging projects visible to drivers headed east and west bound over the pass.

Most of the Engelmann spruce removed on Monarch's western side had been rendered standing dead by the spruce beetle infestations that have plagued Colorado for the last two decades, and were ready to burn. Two years ago, the Forest Service cut down all the beetle-killed spruce trees on the west side of Monarch Pass up to 150 feet from Hwy, 50 - many weakened by beetles and danger

The agency gathered the felled trees into the now clearly visible tipi piles, which measure roughly 8 feet tall and 10 to 12 feet in diameter. In places, the piles are numerous and close together.

"It will of course depend on the snow load, but we hope to have all the piles burned in one to three years' worth of winters," said East Zone Fuels Assistant Fire Management Officer David Carr. The Monarch Pass fuel reduction project is one of many underway in the Grand Mesa, Uncompangre and Gunnison (GMUG) National Forests.

According to Carr, clearing all the standing dead trees back 150 feet from the highway will help protect Hwy. 50 should a catastrophic wildfire strike. Gathering the logs into piles and burning them during the winter months will also help protect the soil.

When forest fires intensely burn ground debris, the surface of the ground can harden. Heavy rain and snow runoff then run off rapidly rather than soaking into the ground. Rapid runoff can generate enough force to move large amounts of rock, gravel and soil, clogging culverts and roadside water ditches.

Once culverts and ditches are clogged, the road itself, both paved highways and improved forest roads, can be overrun and

Severe damage to roads and roadbeds then can result - but the damage doesn't stop there.

Sediment-laden runoff then floods into streams severely impacting aquatic ecosystems and water quality. Finally, raging post-wildfire runoff can strip away streamside and roadside flora which sets the stage for noxious weed infestations.

Similar fuel reduction efforts are underway on the east side of Monarch Pass, where the logging has created neat rows of felled trees that resemble ski runs. The Forest Service's Salida Ranger District completed the collaborative project last fall - the logging effort also aimed at ensuring recreationalists are safe in the popular backcountry skiing area after a wave of beetle kill struck the slopes between 2015 and 2017.

According to Silviculturist Alex Rudney, the slopes were too steep to operate conventional logging equipment without causing significant soil compaction and damage in the removal area. Partnering with a company from the northwest, the district brought in new wenchassist technology that allows the machine to move up and down without causing a lot of erosion because of the low ground pres-

The special tree harvesters



Wood piles on the west side of the pass

have eight wheels to spread out the weight of the large machines as they clear trees. A tether also helps prevent excessive tire-spinning, which can cause ruts and damage to the forest floor. After removal, some of the trees were sold to sawmills and firewood operations, while a portion were left along the roads for the public.

The project, targeted at finding a way to treat steep slopes with acceptable outcomes, is the first of its kind in the area, Rudney

said. Similar studies have only been done in the northwestern

"The Rockies are a lot different, and we wanted to see if it would work here," he said.

(Paul Wayne Foreman can be reached at paul@gunnisontimes. com. Contact Bella Biondini at 970.641.1414 or bella@gunnison-

## HERE ARE YOUR GUNNISON VALLEY TOP DOG (ANDIDATES 2022!

WHO IS Gunnison Valley's Top Dog? • VOTING IS NOW OPEN! \$1 per Vote. Vote early, and Vote often... at any one of the following locations:

**ACE HARDWARE PAWSITIVELY NATIVE**  **TURQUOISE JUNCTION DOG CABIN RESORT** 

(Checks made out to GVAWL) · Voting Deadline: 5pm August 24

**GUNNISON BANK AND TRUST** HAIR OF THE DOG





BAILEY Bailey loves he job she is very upportive of staff and resident always ready to share her love.





BENNY Hi y'all, I'm Benny and I'm a big goofy fluff ball who loves the snow, everyone meet, treatos, and my mr. Fishy toy



BRONCO Bronco lives to run swim and chee Valley!



Clark is the happiest hiking partner, loves busy town walkies and making new friends of all sizes, his loud bay

welcomes pets from all and keeps the trails safe from big cats and bears alike!



CREAM CHEESE Yin Yang powe

LANA Top Dog or not, I'm

the top dog in this

house. Cats rule.

IDGIE

how to sleep in

but she knows how

The winner will be published in the September 1st Edition of the Times

CLARK



small package REDNET CUDN everything comes

Judy is the

embodiment of

having lived through

ain and hearthreal

but still has a heart the size of a mountain in such a



PERCY Percy the Pyrenees: picky about who he likes, where he goes, utside, but still eats



fm a great hunter but not a killer in alive, including snakes.



This is our dog Rosie... she loves to hike, paddleboard, skr, and walk around town



SAGE

i'm bossy but i'm

super cute as I do it

ROSIE





















co-pilot gettin' them highway snoozes.



VA7 a man's best friend











## City opens renovated RV dump station

#### Site includes public and commercial water fill station

Bella Biondini

Times Associate Edito

This summer, the City of Gunnison opened the newly renovated commercial and recreational dump station — an upgrade that staff hope will prevent spillage and create better vehicle flow in and out of the area.

Before the \$600,000 upgrade, campers and local commercial tanker trucks, which often pump porta potties and athome septic tanks, shared the station. With only one pit for dumping waste, the site was subject to splashing and easily became congested when multiple vehicles needed to use the facility. The new station creates some separation, reserving designated spots for commercial and recreational dumpers. For a small fee, a new potable water fill station is also available on site, making it a "one stop shop" for travelers in RVs, said Water & Wastewater Superintendent Mike Rogers.

The site, located at 811 S. 8th Street, just west of the Gunnison-Crested Butte Regional Airport, was previously operated using an honor system for commercial dumpers and was free of charge for RVs. After looking at the cost to dump in the surrounding areas including Crested Butte and Montrose, city staff increased the fee to \$15 for campers to

help the city cover the expenses of managing the waste as it funnels into the local wastewater treatment plant.

The renovation project also allows staff to monitor what exactly is being dumped into the system. Instead of waste, vehicles would sometimes dump oil or chemicals into the pit, which would flow into the sewer and eventually the wastewater treatment plant, where it has the potential to upset or damage the microbiology of the plant.

Public Works Director David Gardner described the plant as a "sensitive, living organism."

"If we drink Drano, it will upset us," he said. "This is the same thing, the bugs at the plant like certain things, they have a certain menu. When it's outside that menu, they can get sick and sometimes they die, and then it takes a week to restart the plant."

To prevent this, a new machine measures the pH of the materials entering the dump. If it detects a level that would harm the equipment at the plant, it shuts the valve. It also screens out trash and precleans the waste water before it enters the collection system.

An added bonus for travelers as well as commercial haulers is a new water filling station, complete with a backflow protection device to prevent cross contamination. With a credit card, users can get up to 1,000 gallons for just over \$5.

Before, campers siphoned water from a faucet at the City of Gunnison's Public Works Department or at Legion Park, a popular fill station. Anyone can use the fill station, including



Retta Bronuin

Alpenglow Septic owner Adam Stowell said having separate systems prevents commercial haulers from competing with campers. "It was just a waiting game with the campers when we shared the dump station before" be said

farmers who sometimes fill up their chemical tanks, Gardner said. The park's fill spot lacks backflow protection and will be closed to protect the public water supply from the risk of contamination.

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



A new bulk water fill station is available for the public

## Solheim on board as new county CFO

#### Makes the move from academia to public service

Paul Wayne Foreman Times Staff Writer

With more than 25 years of financial and accounting industry knowledge and experience, Perry Solheim has been hired by Gunnison County as the new chief financial officer.

Solheim, since 2019 working as the Finance/Administration Manager for Mt. Crested Butte Water & Sanitation District, began his part-time Gunnison County CFO duties on July 18. He will transition out of his Mt. Crested Butte duties into the full-time CFO position over the next few weeks.

Prior to his Mt. Crested Butte position, Solheim was an assistant professor of accounting at Western



Australia So

Gunnison County's new CFO Perry Solheim.

Colorado University, Fort Lewis College and Montana State University from 2007-2019. Solheim also has served as the Southern Ute Indian Tribe's growth fund controller.

Tribe's growth fund controller. His educational resumé includes bachelor's degrees in economics and philosophy from Claremont McKenna College, accounting from Fort Lewis College and a PhD in accounting from the University of Utah. Although he believes the

Although he believes the county to be healthy financially, Solheim said that covering all the individual expenses of the county's various departments is "hamstrung" by state statutes, which set strict limits on how tax revenues can be used, depending on how the funds were raised.

"It's a challenge to convey to the electorate the complex tax system used to fund vital services that many residents rely on," Solheim said. "But it's something we need to do."

Gunnison County Commissioners, aware of an impending shortfall affecting the Road and Bridge Department, have discussed asking voters for a tax increase, despite healthy fund balances in other departments. The Road and Bridge funding issue has been tabled until the 2023 election cycle.

"It makes a difference when the electorate understands why increased funding is needed. I think a lot of people do understand, but they don't write letters to the editor," Solheim said.

His move into government finance followed his becoming a Christian in 2017. Following that, Solheim felt led to leave academia, where he felt that the impact he was having as a professor over time was getting harder and harder to see.

Solheim and his wife Wendy have four children. Wendy is the CEO of the Legacy Family Ministries and the director of the Lighthouse Pregnancy Center.

(Paul Wayne Foreman can be reached at paul@gunnisontimes.com.)

## Lawsuit aims to enforce air quality at West Elk Mine

Colorado Gov. Jared Polis's administration over its failure to ensure the West Elk coal mine in western Colorado complies with state and federal clean-air

"It's time to put an end to Arch Coal's free pass to pollute," said Jeremy Nichols, climate and energy program director for WildEarth Guardians. "The Polis administration must follow through and ensure the West Elk mine operates in compliance with air-quality laws and protects clean air and people."

Located in the North Fork Valley near the town of Paonia, the West Elk mine has come under fire in recent years over its air pollution. The coal mine, which is the largest in Colorado, is a significant source of smogforming volatile organic compound emissions, as well as methane, a potent greenhouse

gas.
"This failure to comply with air quality laws is unacceptable to Gunnison County residents and visitors who value clean air, climate change action and healthy public lands," said Matt Reed, public lands director with Gunnison County-based High Country Conservation Advocates. "It's time for action, not more foot-dragging."

In a recent agreement, Arch committed to better control pollution from the mine and obtain a legally required federal air-quality permit to ensure compliance. In the meantime, the Colorado Department of Public Health and Environment's Air Pollution Control Division has failed to meet a legal deadline to approve the new permit, leaving the mine to operate without

"This permit has languished for too long, so I'm hoping this lawsuit will push the agency to do its job to protect people and wildlife the way our cleanair laws intend," said Allison Melton, an attorney with the Center for Biological Diversity. "State and federal pollution laws only work if agencies follow them."

The lawsuit, filed on July 26 in Gunnison County District Court, asks the court to order the Air Pollution Control Division to approve a legally adequate air-pollution permit for the West Elk mine.

"Coal mines have a devastating impact on air quality and

Conservation groups sued climate, which is why we have these laws on the books," said Sierra Club Senior Attorney Nathaniel Shoaff. "The Polis administration has talked a lot about how it's improving air quality, but needs to put those words into action to reduce the impact of Colorado's remaining

#### It's time for action, not more foot-dragging.

Matt Reed Public lands director with High Country Conservation Advocates

Under the state's cleanair law, major polluters are required to obtain and comply with air-pollution operating permits. The Air Pollution Control Division is required to issue these permits within 18 months of receiving an applica-

"It is ludicrous that one of the biggest air pollution sources in the state of Colorado is operating without a permit," said Peter Hart, attorney with Wilderness Workshop. "The state simply cannot ignore its duty to manage emissions that are destroying our climate, contaminating the air we breathe, and shrouding the beauty of the North Fork Valley and Colorado in pollution.

In this case the state was required to either approve or deny a permit for Arch Coal's West Elk mine by September 2021. Nearly a year later, the division has not taken action to ensure Arch operates in compliance with state clean-air laws.

The lawsuit seeks an order to compel the Air Pollution Control Division to take final action without delay. Groups have won similar suits against the Polis administration, including one over the state's delay in updating air-pollution permits for the Suncor oil refinery north of Denver.

> Source: High Country Conservation Advocates



101 North Main Street | Downtown Gunnison 11,118 SF of Fully Rented Commercial Space 9 Retail & Office Units | Offered for \$1,650,000





225 N Grand Avenue | Tincup 3 Bedroom | 3 Bathroom | 1,692 SF | Luxury Cabin | Expansive Covered Deck | Offered for \$875,000 Open House | Friday | 8.5.22 | 12pm - 3pm



Maggie Dethloff Top Producing Bluebird Broker in 2021 c 970.209.7880 maggie@bbre1.com

reliable > relatable results

## Highly Desirable Homes



#### COMMUNITY BROKERS

(STO) BAT-TEEL DISOMFORSALE COM



#### 14325 CR 76



structed with quality fe out this 2,945 sq ft ho



















## CPW research maps migration patterns

#### Wildlife managers cope with escalating challenges

Paul Wayne Foreman

Gunnison County Commissioners last Tuesday heard a presentation from Colorado Parks and Wildlife representatives on the agency's ongoing efforts to gather data with the goal of protecting and preserving the Gunnison Basin's wildlife. CPW underlined the need for balancing the pressures of development and recreation against the nonnegotiable needs of healthy, sustainable ungulate populations.

The presentation focused on the basin's large elk population, as elk are considerably more impacted by human presence and activities than deer.

"The take-home message is habitat, habitat, habitat, heause without habitat, we can't sustain and support the wildlife in our valley that make our lives meaningful," said CPW Area Wildlife Manager Brandon Diamond. "Wildlife is part of our local culture, our local economy, and thus habitat and habitat preservation are going to be huge going into the future."

The desirability of living and recreating in Gunnison County and western Colorado, in general, has imposed ever-increasing impacts on the area's wild-life and vegetation. To better understand how human and environmental factors impact the basin's wild ungulates, CPW sampled animals on their summer ranges by affixing GPS collars on elk in their Gunnison Basin winter ranges.

The data collected beginning in October 2020 enabled the CPW to trace the migrations of 10% of the elk population statewide in this way. Data collection efforts utilized "net guns" fired from helicopters, to subdue the animals sufficiently to permit placing tracking collars on the animals with a minimum of distribution.

"Between winter and summer ranges elk are pretty much all over the landscape," said CPW Terrestrial Wildlife Biologist Kevin Blecha. "There's almost no place that elk won't utilize. The Gunnison Basin has an abundance of public lands, but land that appeals to humans also appeals to wildlife."

Their efforts disclosed that during a big snow year, elk might travel more than 72 miles one way through deep, midwinter snowpacks, traveling from the Upper East River to the Saguache Creek drainage. Some animals begin their trek regardless of the weather, but as the snow starts to pile up in mid-January the remaining elk begin

to follow

"Always in a single file, they travel in search of potentially shallower snowpack, never knowing what's just over the divide," Blecha said.

#### Population rebound

Before European settlement in North America, elk were widely distributed, ranging from east to west coasts, and from northern Alberta to Mexico. Wildlife biologists estimate that the elk population peaked at 10 million animals.

Yet, through the pressure from an ever-increasing population, and the subsequent spread of agriculture across the Great Plains states, by the early twentieth century U.S. elk numbers had dropped to approximately 100,000 individuals, a hundred-fold decrease. The total elk population of Colorado in 1910 was thought to be 500-1,000 animals with most in northern Gunnison County, Blecha said.

Through regulation and "learning as you go" intensive management over the last century, wildlife managers brought Colorado's elk population back from the brink of collapse. By the mid-1930s, the state's elk population had rebounded to approximately 27,000.

Now, Colorado boasts the largest elk herd in the U.S., about 300,000 animals. The Gunnison Basin's elk population hovers around 15,000 animals, varying from year to year depending on the weather and hunter success or lack thereof.

Wildlife managers maintain the state's elk and other ungulates' populations through strictly regulated licensed game hunting. The state directs revenue generated from hunting license sales to wildlife habitat restoration on public land plus the introduction of other spe-

"Today, the Upper Gunnison basin provides 500,000 pounds of organic, free-range meat annually," Blecha said,

However, wildlife managers face escalating challenges in the long term.

#### Current habitat headwinds

According to the Colorado Water Conservation Board, "Colorado has warmed substantially in the last 30 years and even more over the last 50 years. Future estimates project temperatures rising an additional 2.5 to 5 degrees Farenheit by 2050. This means the warmest summers from our past may become the average summers in our future."

Warmer temperatures translate to more rain and less snow, and earlier and scantler snowpack runoffs with water quality and quantity impacted. A hotter and drier Colorado will have stressed ecosystems, an earlier arriving and later persisting fire season, and impacts to air quality as well as limited recreational opportunities.

Then, there's cheatgrass. Native to Europe and Asia, it hitchhiked to the U.S. courtesy of European settlers in the 1800s. An invasive species. it sprouts earlier than native grasses, grows densely — up to 10,000 plants per square meter is fairly tall, rapidly seeds and dies, its fine foliage and seed tops ripe for wildfire. Cheatgrass outcompeted native vegetation and has become dominant throughout parts of the Great Basin and Colorado. The white settlers' cattle and sheep grazed down the native grasses and forbs, which were susceptible to overgrazing. Cheatgrass filled the void.

Cheatgrass provides less nutrition than native grasses and forbs and burns much more readily. While the native ecosystems had 30- to 100-year fire intervals, some hard-hit parts of Idaho now have 3- to 5-year fire intervals. And the invasions are self-sustaining in that cheatgrass prefers disturbed soils and is a pioneer species after a fire.

While fire in cheatgrassdominated grasslands tends to degrade forage for the basin's ungulates, the opposite is true for forest fires.

"Many people worry that wildlife just perishes in wild-fires, but believe it or not, wild-fire is beneficial to them, and the plants and animals are well adapted at responding to it," said Blecha. "Wildfire improves forest habitats. Yet, homes in forested areas diminish if not eliminate the cycle of fire regeneration."

Wildland development and its accompanying traffic increases present additional challenges for elk and other ungulates such as mule deer, bighorn sheep and pronghorn.

"All the activities that are happening around a house, the lighting, noise, pets, cars up and down the roads and driveways, mowing the lawn all have an impact." Blecha said. "There is some level of disturbance radiating around that house, maybe 100 yards, maybe 1,000 yards. The more remote the building site, the more impact a single home can have."

Since 2015, highway traffic volumes have increased by 42% on Hwy. 135 and by 30% on Hwy. 50. Animals crossing the highway face increasing mortality.

"Within our respective areas of influence we should be looking for opportunities to elevate the priorities of the Gunnison Basin Highway 50 corridor any way we can," Brendon said. "The need is there. There is a lot of wealth in this valley and a lot of conservation-oriented people. Perhaps we can leverage public-private funding over time."

(Paul Wayne Foreman can be reached at paul@gunnisontimes, com.)





# UNNISON COUNTRY

\$1.00 Vol. 141. No. 29 Thursday, July 28, 2022

## **Nestled** in a wild place

Community buy-in protects great blue heron nesting site along Slate

> Bella Biondini Limes Associate Editor

Tucked away from the main road, Tim Szurgot's house can't be reached by car, and instead requires a brief walk on foot through a narrow gateway of greenery. The path leads to a rickety wooden bridge over the Slate River, relatively low and slow moving this late in the summer.



Great blue heron nests are hidden in dead lodgepole pine trees along the upper Slate

#### INSIDE TODAY

**NEWS:** City continues to push ballot initiative forward, A7

COMMUNITY: Seeing the valley from above, B1



SPORTS: Gunnison Red takes championship, B9



SPORTS B9 **OPINION A14** CLASSIFIEDS A15-A17 OBITUARIES A2

ONLINE GUNNISONTIMES.COM

## Fentanyl crisis felt Housing authority in Gunnison Valley

New law a blend of deterrence and treatment

> Mike King Spella' to the Times

Use of the highly addictive drug fentanyl is increasing in Gunnison County. However, local public health and safety workers are optimistic that Colorado's new Fentanyl Accountability and Prevention Act provides tools to combat the opioid menace.

Fentanyl is a synthetic opi-oid that is 50-100 times more potent than morphine, according to the Drug Enforcement Administration. Originally developed to help cancer patients manage pain, it has made its way into the illicit drug market, much of the U.S. supply entering the country via Mexico. The Centers for Disease Control and Prevention reported 71,238 deaths in 2021 due to fentanyl overdose.

"There is a very significant drug abuse problem in Gunnison County," said Shelby Mainville, a licensed addiction counselor and clinical social worker. Mainville has worked

at the Gunnison County jail for the last year and, prior to that, at the Center for Mental Health. Though acknowledging that poor reporting of substance abuse numbers makes accurate estimates "impossible," Mainville said she has seen a "big spike over the last two years."

Colorado's new Fentanyl Accountability and Prevention Act increases penalties for possession and distribution of fentanyl. Possession of a substance containing more than 1 gram of fentanyl is now a felony. Additionally, the law includes more severe felony charges for possession of 1 to 4 grams of any substance containing fentanyl. The act also makes it easier to charge people with higher-level felonies for distributing the drug.

However, the act also emphasizes alternative, non-criminal measures such as treatment and harm reduction resources. The new law aims to be a strong deterrent while also supporting compassionate recovery for those in need.

The act provides testing strips and opioid antagonists, chemical counteragents that halt overdoses. Test strips can be used prior to consumption to allow users to determine

Fentanyl A6

## holds second lottery for Lazy K



Gunnison Mayor Diego Plata pulls a winning ticket.

#### Next drawing scheduled for Nov. 4

Bella Biondini Times Associate Edit

Gunnison Mayor Diego Plata reached his hand into a red hat to grab the winning ticket. Those in a room were silent as they waited to hear if the day had finally arrived when they would become Gunnison Valley

On July 22, the Gunnison Valley Regional Housing Authority, in partnership with the City of Gunnison, held its second lottery for the Lazy K affordable housing development in West Gunnison. Of the 65 units planned for the Lazy K project, located on West Tomichi Avenue, across the

Lazv K A6

#### **BRIEFS**

#### **Gunnison County Dems** to hold Unity Dinner

The Gunnison County Democratic Party will hold its annual Unity Dinner fundraiser on Aug. 21 from 4-7 p.m. at the I Bar Ranch.

The event will include live music, a dinner and a meet-and-greet with local elected officials, as well as candidates for state and national offices. To register, visit gunnisondemocrats.org.

#### Sagebrush ecosystem projects receive federal funding

The Upper Gunnison River Water Conservancy District, in partnership with numerous local agencies and organizations, was recently awarded \$400,000 from the U.S. Fish and Wildlife Service to support wet meadow restoration, cheatgrass treatments and other sagebrush restoration work within the basin.

"This is an incredible collaborative project that brings the community together to improve sagebrush habitat through wet meadow and riparian restoration," said Cheryl Cwelich, UGRWCD watershed program coordinator. "It will directly preserve and restore critical broodrearing habitat for the federally threatened Gunnison sagegrouse."

#### City endorses Gunnison Country Food Pantry expansion

During a regular meeting on July 26, Gunnison City Council officially endorsed the Gunnison Country Food Pantry's work and pledged support for the organization's move to a new location.

Earlier in July, Katie Dix and Jodi Payne of the Gunnison Country Food Pantry provided an update on the organization's operations and new building project and asked for council's support. The project, which includes relocation to a new facility and plenty of room for growth, is on schedule and expected to be complete by Labor Day.

#### Big game day is almost here

On Aug. 2, hunters can take a shot at any big game hunting licenses remaining after the primary and secondary draws. Remaining licenses for 2022 are placed on the leftover list and will become available for purchase on Tuesday at 9 a.m. Overthe-counter licenses for elk, bear, archery pronghorn and whitetail deer will go on sale at the same time.

Licenses go on sale online, over the phone, and in person at Colorado Parks and Wildlife offices and sales locations all at once. Hunters on a computer or mobile device at home will have the same shot as someone first in line at a sales location. Limited licenses are first come. first served and this is the first opportunity to get a big game hunting license outside of the draw process

#### **OBITUARIES**

#### Jason Keith Medina

A celebration of life will be held at the Elk's Lodge in Gunnison on Sunday, Aug. 7 from 1-5 p.m. Bring your best fun story about Jason to share with everyone at that time. Happy hour starts at 3 p.m. Cash bar available.

#### **Charles Gordon** Hermann, Jr.

Charles "Chuck" Hermann. 70, passed away on July 6, 2022, in Gunnison, Colorado, He was born in Omaha, Nebraska, on June 1, 1952, to Charles Gordon Hermann, Sr. and Mary Catherine Parr, who both preceded him in death. He married Carol Davis in Tucson, Arizona. She passed away in 2012. Survivors include his two sisters, Mary Pat Jacobson (Mike), Lawrence, and Cathy Madl (Jim) ,Topeka, nephews Alex (Alexandria), Seattle, Ryan, Lawrence and Willie (Katelyn), Topeka. He is also survived by eight cousins, Mary, Ann. Bill. John, Kate, Jim, Tom and Joe and preceded in death by Pat.

Chuck grew up in Topeka, Kansas, and spent many summers in Colorado. He attended Western State College in Gunnison. He moved to Phoenix and became an executive chef at the Pinnacle Peak Country Club, where he met his wife, Carol. They later moved to Topeka and then to Colorado.

He settled in Gunnison, with his dog, Charlie, who also preceded him in death. He had a passion for cooking, golfing and gardening. He loved sports, especially the Denver Broncos, the Kansas City Chiefs and KU basketball. He loved the mountains and had many good friends and neighbors in Gunnison. Chuck was cremated and will be interred in the Gunnison Cemetery with his

CLARKE AGENCY REAL ESTATI

241 N. Main St

Gunnison, CO 81230 Office: (970) 641-0511

#### **Christina Faith** Frances Karr



October 26, 2001 to July 17, 2022. Christina Faith Frances AKA Tina, BooBear, Nunu, Ms. Karr, Boo, Boobsy, Tubsey, Gus's Sister, Eric Karr's Daughter, Reta's Sister and so many other names she loved and adored - left us unexpectedly in the early hours of Sunday, July 17, 2022 to become an Angel in Heaven. She knew no strangers here on earth and someone recently told me there was a name for people like her who gave til it hurt, befriended everyone, was a natural caretaker and had such positive energy - they said she was an "Earth Angel."

Her smile and laughter were bigger than life itself and always changed the world around her. Her time as a special education aide here in Gunnison allowed her to touch hundreds of lives and help so many find joy and believe in themselves. She was also a part of the Ol' Miner Steakhouse team and what a great place for her. Meeting new people was her thing and she made lifelong friendships with strangers there and will be missed

I thank God for all the blessings the Ol' Miner gave her. More recently, Christina jumped into something she always wanted to pursue and, even though she was a girl and didn't know if it would work out she told me, she jumped in feet first when Johnny and Diane hired her as a ranch hand on their ranch in Parlin. This was a blessing I have no words for, as she valued the friendships and work and life this offered. I thank God Johnny gave her a chance! I cannot even begin to write about her friends and what they meant to her, each of you know how much she loved you, all of you! She is expecting you to follow your dreams.

She was born at home unexpectedly in Parlin in the early hours of October 26, 2001. As her dad. I always said she came into the world big and bold and that is how she lived her life. Her love for her family was unmatched. She is survived by her father. Eric Karr. stepmother, Kari Morris, mother, Barbara Higday, sister Reta and brother-in-law, Mathew Morick and their four children. Wyatt, Lila, Isiah and Elijah, her brother, Augustus Karr, stepsister Taila Oulton, stepbrother Orion Oulton, stepbrother Flint Oulton, grandparents Jim and Jane Higday, step-grandmother Laverne Morris and many cousins, aunts and uncles. She leaves Stormy May, her pup, Tomichi, her horse, and Georgie her fluffy cat.

Christina loved God, family, friends, her animals, adventures and laughter. Traveling was something she loved to do and was able to do in her short 20 years and loved every adventure, whether it was with friends or family, she saw the world and changed it along the way. Hunting, fishing, horseback rides, snowmobiles - she even rode on a Harley recently she had bigger than life dreams and wanted everyone around her to reach their dreams too. I pray she will live on through the memories and in the hearts of all of you that she touched on her journey.

A celebration of her life is Saturday, July 30 from 10 a.m. to 2 p.m. at the Gunnison County Fairgrounds. We hope all of you will join us to share stories and the celebration in the only way Christina knew, BIG and BOLD. There will be food and drinks, a short service, lots of purple fun and family and friends. Share a story with everyone or just come and heal and love.

There is a GoFundMe and

an account set up at Gunnison Savings and Loan. This money will create some lasting memorial for Christina as well.

I love you Boo ... until we are together again, Dad.

#### Eileen Grace Bickett (Hogan)



Eileen Bickett was born on June 12, 1958 and passed away on January 13, 2022 after a battle with cancer. Eileen is predeceased by her parents, Gracie Hogan and Mike Hogan and her sisters, Amy Cox and Mary Beth Williams. She is survived by her husband, Bradley, their three sons - Kevin. Chris and Jimmy (Tasha) and her sisters Katie Gurnett (Pat) and Michelle Klippert (Jon), as well as many nieces and nephews. Eileen graduated from Gunnison High School in 1976 and Western State College in 1980. Eileen loved to write, fish, garden and spend time with her family. Her sense of humor and special laugh will be greatly missed. A graveside service will be held for her at the Gunnison Cemetery on August 6, 2022 at 11 a.m., where Eileen will be laid to rest with her mom and



**NEW LISTING** 

Big valley views from this 4 bdrm/3 bath, 2,788sf home on 4.7 acres with loafing shed & corral. Lovely open kitchen, office off the mudroom, main floor master suite. Downstairs features 3 bedrooms, bath, living room, wood stove & bonus space for a home gym or game room, 262 Sage Drive; \$875,000.



FANTASTIC 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: \$498,000.



NEW LISTING Inviting NEW LISTING inviting ranch style log home features 1 acre of horse property. 3 bdrm:2 bath 1,813sf home with outbuilding that includes a horse corral & 2 stalls. New roof installed Summer 2021 including over the attached garage, 1008 US Highway 50; \$650,000,

bdrm/2 bath over 1.700sf house in lower Castle Mountain on 1,5 acres! Large south facing sunroom, spacious west facing deck for outdoor dinners. open kitchen & dining room. 403 Sierra Vista Way: \$625,000.

INVESTMENT OPPORTUNITY! 3 homes total, each home is 2 bdrm/1

bath, tenants pay utilities, \$5,400 income per month. In-town location near the airport and fairgrounds. 314 S. 12th St; \$1,200,000.

NEW LISTING 3 bdrm/ 2 bath home with large yard, detached garage & additional cabin, Large living room & open kitchen, plenty of storage for your toys. Zoned R-3 on 6 city lots, 502 S. 11th; \$630,000.

LAND FOR SALE Very nice lot in the town of White Pine, CO. White Pine has rich Colorado history known for Coal and Silver Mines. This is a great location to build your dream cabin or park your RV. 9900 County Road 888; \$25,000.

PHENOMENAL VIEWS from every window in this nearly 1,800sf ranch style home. Comfortable 3 bedroom/2 1/2 bath, with breakfast nook & formal dining room. Soak up the views and enjoy over 6 acres of your own & a 3 car garage! 1143 Seneca Drive; \$695,000.

HOME ON 50 ACRES in Ohio City features an excellent mixture of wildlife nearby trails, aspen, pines & 300 feet of Gold Creek frontage, 3 bdrm/2 bath house, huge attached garage, large detached barn, touched by Forest Service lands. 5498 County Road 771; \$1,750,000.



Pat Magee watches the great blue heron nests from about 300 meters away, the desired buffer zone. By July 15, the end of the voluntary closure, usually about 50% of the chicks have fledged, "a compromise that is not perfect, but definitely helps," he said



Tubers float from the new Slate River Boat Launch on the river's lower stretch, which was constructed during the fall of 2021 and opened this spring

#### **GBH**

from A1

The Slate twists and turns home, the land slowly dissolves back here, he said. into willows and wetlands some of the most productive in - rounding the upper Slate River Colorado. The wetland ecosys- house a great blue heron rooktem is full of life and home to ery, split into an upper and more than 60 species of birds - the source of the neighbor- highest elevation rookery in the hood's name: Wildbird

towl and wandering elk, Szurgot described Slate River Valley as a great blue heron "superhighway." Chances are, it someone sees a heron up Brush Creek or through Szurgot's backyard, and - Cement Creek or elsewhere in as the hill drops away from his Gunnison County, it's coming

The conferous trees surlower colony - possibly the country. To protect the berons Amongst the migratory water- during their nesting period, the

4.4 mile stretch of winding river from Gunsight Bridge, nestled in the gateway to the Qh Be Joyful drainage down river to the Rec Path Bridge in town, has a recommended no-float period from March 15 to July 15.

Flash back 50 years to when the first houses were built along the Slate in the 1970s. Szurgot said the Wildbird community was one of the first to draw attention to the disturbance created by floaters who passed under the nesting herons who arrive in March each

year to breed, whether the val- alists and the norting become Although residents and visitors have been floating the Slate popularity of the stand-up padsometimes nearly 100 people per day to the upper stretch, and

underneath the nesting herons.

Worried about the heron population as river recreation boomed, neighbors went to the Crested Butte Land Trust to look River Working Group - made up of more than 15 stakeholders, including representatives from the Town of Crested Butte. the ranching community, local business, environmentalists and land management agencies - cityscape of Chicago, and didn't was formed to address the con- even know what a great blue

ley is blanketed in snow or not. that called the once quiet Slate

Now, 2022 marks the end of "forever," the explosion of the a five-year study that quantified river usage, brought in river dieboard after 2010 attracted stewards and initiated a community push to protect the rookery in one of the most pristine wetlands in the state. As the study comes to a close, the community's willingness to compromise makes it a story of success backed by residents who hope for a solution. In 2018, the Slate the berons return year after year and long after they are cone.

"This is a wild place still, although we are right next to town," Szurgot said, "I want it to be that way for my kids."

Szurgot grew up in the flict between river recreation- heron was. When he and his



The Slate River flows under Gunsight Bridge

We often hear about sort of sad stories in conservation, and when and where people aren't able to get along, and were not able to come up with solutions that work in the long run. I don't think this is one of those

Landan Schaller

stories.

family moved to Crested Butte in 2011, he said he was unaware and the responsibility that came rifices in an attempt to preserve the landscape they live in, only venturing so far into the backyard and retraining from floating like they used to.

We should all try to be part of the solution, which is not easy in this day and age," he said.

The Wildbird subdivision has housed residents who fought not only for the birds, but for the wildness of the place. But it's getting harder and harder he said. Directly downstream, a mulu-million dollar home is being constructed close to the

"When the money moves in.

it's hard to battle," Szurgot said. "It's hard to stand up to that."

Slate River Working Group has accomplished gives him hope that the birds will recover, This summer, he's seen less than 60 herons, the traffic moving mustly to the lower section where tubers pass through in a single

"Some people have the natrative 'oh it's just loud landowners who don't want people coming through their property' and that's not it at all ... If people still want to float it, float it, but do know that your recreation is potentially changing the makeup of a place."

'We've already taken so much' With a spotting scope slung over his shoulder. Pat Magee trudged through the forest that snaked along the Slate River, the tip of Gothic Mountain visible on the horizon. In the distance, heron chicks screamed for dinof how magical the spot was - ner as a parent alighted on the nest. To a passerby, the sound with it. His family has made sac- was loud and jarring, like the sound of tiny dinosaurs hungry

> Magee, associate professor of wildlife and conservation biology at Western Colorado University, has been monitoring the birds since the study began five years ago. Approximately 300 meters away, he watched dead lodgepole pines where the nests are hidden, counting the boarding on the Slate River was chicks, which hatched in early to mid-May

for food.

Because great blue herons are colonial nesters, the entire regional population is in one spot, making them especially vulnerable. While river recre-

Szurgot said the work that the

watercrafts pass underneath the ation makes up less than 1% of all recreation in the Slate River Valley, more than 80% of the up to 100 floaters, boaters and disturbance to the herons is associated with that small pur-

In 2018, Magee recorded 25 active nests. In 2021, the number had fallen by nearly half - "an alarming downtrend," Magee said. This year, he counted 17, but two blew out of the trees during the intensely windy spring months

One of his students, Camryn Uetz, has been visiting the nests twice a week since the birds first arrived in March. She keeps detailed accounts of their behavior and the amount of noise on the road, marking the number of people walking biking and driving by as well as floating along the river. If the community doesn't find

a middle ground - balancing recreation and the space the birds need - their populations are just going to keep getting smaller, Uetz said "It's really important that we

try to preserve what we have left, because we've already taken so much," she said.

#### An exception to the rule

In 2014, stand-up paddlea novel concept and by 2017. people were ready to to fight over it, said lake lones, the executive director of the Land Trust. From a historic perspective, very few people hothered to float it because there is not real-



is a wild place still, although we are right next to from," Szurgot said. The



Pet Magee takes detailed notes on each numbered nest site, a "dynamic map" of happenings as the chicks prepare to take their first flights.



A great blue heron flies over the wetlands.

ly any whitewater. This changed with the commercialization of stand up paddleboarding and easy access to the equipment,

"A raft is pretty expensive, a kayak requires really special training," Jones said, "But stand up paddleboards made these rivers accessible to a lot of people very quickly."

In addition to the data Magee and his students collect, the Land Trust has attempted to quantify usage along the Slate each summer as well as employing a river steward that moves hetween the Gunsight Bridge and the new Slate River Boat Launch put ins to educate river goers - giving them the most information possible to make an educated choice, said Landan Schaller, who began working as steward at the begin-

rung of the season. Even though the voluntary no-float means that some individuals choose to float anyway, the Slate River Working Group's ask has been largely successful. Between 2019 and 2021, the number of recreationalists floating the upper stretch has fallen

"We often hear about sort of sad stories in conservation, and when and where people aren't able to get along, and were not able to come up with solutions that work in the long run, Schaller said. "I don't think this is one of those stories."

As the West continues to grapple with the ongoing effects of a 20-year drought, closing the upper section until July 15 has frequently meant a full-season closure due to low flows along the Slate. The last year there was enough water left to float was 2019 - a risk high enough some may choose to float during the voluntary closure because there may not be another choice.

Despite this, Jones compared floating during the voluntary closure to someone having a campfire during a fire ban.

"Of course a paddleboard is not going to light the forest on fire, but if everyone's the exception to the rule then we're going to lose precious resources, in this case that population of birds," lones said

(Bella Riondini can be contacted at 970,641,1414 or bella@ gunnisontimes.com.)







# HCCA offers opportunities to restore impacted lands



curter

HCCA volunteers work on a restoration project on Flat Top Mountain. Left to right, Chloe Beaupré, Annatèa Saylor and Patricia Wilson.

Paul Wayne Foreman Times Staff Writer

From Aug. 3 through Sept. 24, High Country Conservation Advocates (HCCA) has planned four ecologically restorative projects located in Taylor Park, the Ohio Creek Valley's Miller Ranch State Wildlife Area and the Willow Creek drainage north of Blue Mesa Reservoir.

These four projects will provide nine days of volunteer opportunities for people to learn how to restore and repair sensitive ecologies and then put the techniques into practice.

Beginning in 2018, HCCA has added to its palette of environmental advocacy with a range of projects offering locals and visitors opportunities for taking action to repair and restore areas facing cumulative impacts.

The restorative projects include:

Taylor Park Fence Project, Aug. 3: Protecting riparian and wetland habitat, and a sensitive wetland area subject to cattle grazing.

Taylor Park Wetland Restoration Project, Aug. 25 and 27, Sept. 9-10: Restoration of riparian and wetland habitat, by constructing beaver mimicry structures using wood and rocks

Miller Ranch State Wildlife Area, Sept. 3-5: Volunteers, Colorado Parks and Wildlife, Upper Gunnison River Water Conservancy District, and the U.S. Forest Service will work to restore riparian and wet meadow habitats in the sagebrush shrub lands along the Ohio Creek Valley. Volunteers are invited to bring tents and bags and camp out.

Upper Willow Creek (Wet Meadow Restoration), Sept. 24: Restoration of critical wet meadow habitat above Blue Mesa Reservoir.

Volunteers should pack the necessary personal effects such as sunscreen, hats, windbreakers and camping equipment for the overnighters. HCCA will provide working gloves, tools, lunch and water. For more information visit hccacb.org or email eli@hccacb.org.

(Paul Wayne Foreman can be reached at paul@gunnisontimes.com.)



#### MONSOON IMPROVING LOCAL DROUGHT

August 10, 2022
 488 Views



## Kiley Flint Team Leader | 970.596.3219 kiley@crestedbuttecollection.com crestedbuttecollection.com





#### Lower Colorado Basin in crisis management

[ By Katherine nettles ]

In a tale of two updates, the Upper Gunnison River Water Conservation District (UGRWCD) has positive news to share on how the consistent rains this summer have improved the drought conditions locally; however the Colorado River Water Conservation District (CRWCD) is looking at a less encouraging reality that ongoing problems downstream of the Gunnison Valley might affect the future of water storage, agriculture, planning and litigation.

On Tuesday, August 9, UGRWCD water resource specialist Beverly Richards reported to Gunnison County commissioners that general hydrology in the Gunnison Basin is better off than it was in early summer and drought conditions might even be lifted in the next month.

Richards showed a drought monitor from August 2 compared with July 5 when drought conditions had moved into a more severe category after inadequate moisture in late spring and early summer. "Gunnison County is now almost entirely in moderate drought conditions, and that is due largely in part to monsoon rains that we've gotten for the past month and a half." The precipitation for the past 30 days ranged around 75% to 150% of normal, even reaching 200% just north of Hinsdale County. Richards did note that the basin has been in drought for the past 150 weeks, since September 17, 2019. "That's a long stretch," she observed.

That long run might come to an end if rains persist. The 30-day outlook shows a 33% probability of above normal precipitation for the entire Gunnison Basin, and even more so in western Colorado. Richards said that if the outlook rings true much of the county's drought conditions might be further improved, "And even a portion of Gunnison County is showing that drought conditions will likely be removed."

Stream flows are just about normal for this time of year, which is also an improvement from the past three years. Reservoir storage for the entire Gunnison River Basin is at 72% of average, and 58% of average for the upper Gunnison Basin. Blue Mesa topped out at 48% of normal, and is now going down with current

storage levels at 44%. The Upper Colorado River drainage basin is at 65% of average, having improved from June when it was at 59% of average.

Algae blooms are worsening in Blue Mesa and creeping into other parts of the reservoir as the season continues. The UGRWCD is working on a USGS and National Park Service study of the algae blooms to better understand and predict them.

"We have been receiving calls and emails from people saying that they are seeing more algae in our local rivers. This is not necessarily alarming," said Richards. They are likely associated with ongoing drought, low stream flows and resulting warmer water temperatures. Water quality monitoring efforts are keeping an eye on it, however.

Other ongoing projects in the upper Gunnison Basin include a gap weather radar, which has been delayed due to a contractor issue and is still in need of dedicated funding support, and drought contingency planning. UGRWCD general counsel John McClow discussed the recent Inflation Reduction Act that included \$4 billion in provisions to combat drought. "That's encouraging there as well," said Richards.

#### **Upper Colorado Basin**

CRWCD board member Kathleen Curry and McClow discussed the long-term needs of planning around a thirsty lower Colorado River basin and critical shortages at Lake Powell and Mead. Lake Powell is 27% full at 3,535 feet, just 10 feet above the critical storage elevation needed to ensure hydroelectric energy production. Lake Mead storage elevation was 1,040 feet on July 31 which has initiated official shortage conditions. The level at which shortage is declared is anything below 1,075 feet.

McClow said there are predictions that Blue Mesa will be at 32% of capacity at year end. The plan remains to release 500,000 acre feet from Flaming Gorge, and the Bureau of Reclamation is asking lower basin states to implement drought contingency measures and demand management strategies.

McClow noted the consistent trend is less water. "The lower basin is consuming more water than there is; it finally caught up with us," he said, and there will need to be a significant reduction in both agriculture and consumption on the lower states. He said growing alfalfa to export to China, for example, doesn't make sense in the lower basin.

Gunnison County commissioner Liz Smith asked what the Gunnison Valley might do to help in long-term planning. "Locally we're doing pretty well," McClow responded. He said the UGRWCD has good programming and outreach, municipal conservation is strong and, "Our irrigators are by necessity

consuming moderate amounts of water...they are very successful at it, and very efficient. In our home community we are where we need to be."

State-wide, McClow said every major municipality has been working on this. "Aurora has decided they are going to pull up grass," he said. And if lower basin states fail to come up with a plan by August 16, "the federal government will act unilaterally to protect infrastructure," he cited. However, he added that nobody really knows what that means, and the authority there has never been tested.

Curry echoed McClow's remarks. She summarized the most recent Gunnison Basin roundtable meetings, river district meetings, and other water law related meetings during which the state engineer and other experts have presented.

"I would say there are more questions than answers," she said of water conservation enforcement.

The nine roundtables in the state might be allocated funding from water supply reserve funds to bring each roundtable to about \$1 million in funding. "We could start funding project requests at a higher level," Curry said of the potential bump for the Gunnison Basin Roundtable.

The updated 2023 Colorado Water Plan is now available for comment and can be found at cwcb.colorado.gov/colorado-water-plan.

Commissioners and Curry discussed the importance of communicating the values of local ag when discussing water conservation.

"We grow a native crop, we don't have to seed it, we don't have to fertilize it, we don't use pesticides, we don't use electricity; we grow something that's sustainable," said Curry. "And I bet you five bucks that most people who drive by don't even know that it's grass hay instead of alfalfa." She suggested that people adjust personal conversations to highlight that better to visitors and newcomers. She also said the importance of ag in Colorado is sometimes undervalued. "When we're talking about food production for our country and food security, that should be taken into account."





#### **WATER: THE LIFEBLOOD OF COLORADO (PART 3)**

2 August 10, 2022 465 Views

In Colorado, water's value and influence shouldn't be underestimated

[ By Duane Vandenbusche ]

(This is the third of three parts of an abridged address by Dr. Duane Vandenbusche as part of his State Historian Address delivered in May of 2021. The address was given in 2021, but the situation is one that is pertinent today and into our future. —Mark Reaman)

#### **Fast forward**

By the 1950s, it was obvious that there was a great need for storage of water in the Upper Basin so it could deliver water to the Lower Basin when needed later in the year, after spring runoff. The Upper Basin also wanted storage of water for itself. This prompted Western Slope Congressman Wayne Aspinall, head of the House Interior and Insular Affairs Committee, to champion the Upper Colorado River Storage Act, which Congress passed in 1956. The act called for the building of six dams in the Upper Basin states—three on the Gunnison River: Blue Mesa, Morrow Point, and Crystal Dams—plus Navajo Dam on the San Juan River near Farmington, New Mexico, Flaming Gorge Dam on the Green River in Wyoming, and Glen Canyon Dam at Page, Arizona.

The act also called for the building of water projects for the Upper Basin to transport and make use of the stored water.

In the midst of increasing demand for water, population growth in Denver and along the Front Range on the east side of the Continental Divide led to controversial transmountain water diversions. The first major diversion was the Moffat Tunnel, which took water from the Fraser River on the Western Slope near Winter Park through a six-mile tunnel to Denver in the 1930s. The granddaddy of them all—the Colorado-Big Thompson Project—diverted water from the Colorado River at Grand Lake through the 13.3-mile Alva Adams Tunnel underneath Rocky Mountain National Park to Estes Park, and then down the Big Thompson River to communities along the northern Front Range. Built from 1938 to 1953, it cost \$160 million and has the right to divert 310,000 acre-feet of water.

The Roberts Tunnel was another major diversion. Built from 1958 to 1962 by Denver Water, it took water from the Western Slope at the Dillon Reservoir near Silverthorne through a twenty-three-mile underground tunnel to a branch of the South Platte River near Grant on the Eastern Slope, ultimately allowing it to flow to Denver. The final major transmountain diversion was the Fryingpan-Arkansas Project, built from 1962 to 1974. This project diverted water from the Fryingpan River near Basalt on the Western Slope through the six-mile Boustead Tunnel into Turquoise Lake on the Eastern Slope and then down the Arkansas River into southeastern Colorado. All told, today in 2021, there are 38 transmountain diversions, taking 500,000 acrefeet of water from the Western Slope to the Eastern Slope of Colorado.

The water situation in Colorado and the West is dire. The West and Colorado are in the midst of one of the worst droughts in recorded history. The Colorado River is over-appropriated and there is not enough water to supply the 40 million people who depend on it. Mountain snowpack in the West has declined 15% in the last 20 years and Colorado River flows are down nearly 20%.

Much of Colorado, in the fall of 2021, is in what experts call "extreme drought." The state's water supply depends on three interconnected sources—snow, rivers, and groundwater—and all are in trouble. Fights over water in Colorado and the West today involve industry, agriculture, recreation, cities, environmentalists, power companies, the federal government, and land developers. We must accept the fact today that we live in an arid land—and act accordingly.

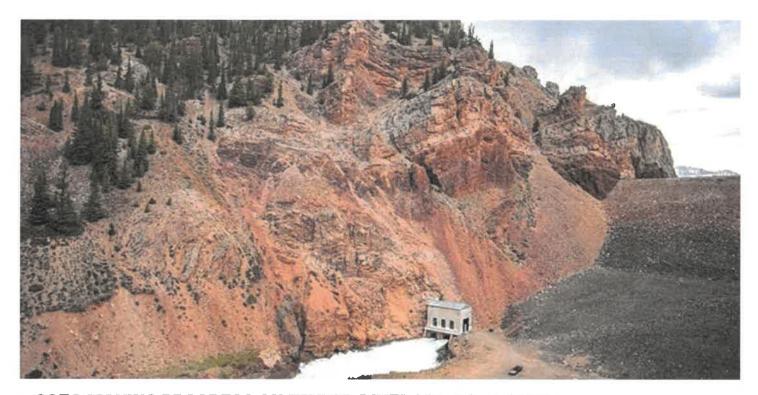
The day, I believe, is approaching when we will see "the Great Eastern Movement" when people have to leave Colorado and the West and move east where the water is. Former President Gerald Ford, talking about water in Colorado, once declared, "Education costs a lot but ignorance costs a lot more."

The only thing that stops growth and more population in Colorado and the West is economics. When water bills rise to thousands of dollars a month, growth will stop. Many would like to live in Aspen or Vail, but with the price of a home in the millions, they can't afford it. That analogy also applies to water. The Western Slope, where 80% of the water is, and the Eastern Slope which wants that water, will continue to fight for

the precious liquid. The Western Slope view of the Front Range is colored by transmountain diversions of the past, while the Eastern Slope view is, "What's mine is mine and what's yours is negotiable."

The major problem today regarding water is climate change. The National Research Council recently determined that the earth is the hottest it has been in 400 years. It declared, "Climate change and soaring population across the Southwest threatens to overwhelm the main water source for millions. The Colorado Basin is going to face costly, controversial, and unavoidable trade-off choices along with demands threatening the area's ability to cope with droughts and water shortages."

So, water truly is the lifeblood of Colorado—and there's not enough of it. What does the future hold?



### **GCEA MAKING PROGRESS ON TAYLOR RIVER HYDRO PROJECT**

② July 6, 2022 ③ 1,200 Views



Target to break ground spring 2023

[ By Kendra Walker ]

Gunnison County Electric Association (GCEA) is currently in the process of developing a small hydroelectric generating plant at the Taylor Park Reservoir Dam. When completed the plant's 500 kilowatt (kW) generator will operate at or near full capacity 24 hours a day year-round and produce on average over 3.8 million kilowatt-hours (kWh) annually. "That's about 450 Gunnison County households a year," said GCEA strategy execution specialist Matt Feier.

In 2020, GCEA and the Uncompandere Valley Water Users Association (UVWUA) formed Taylor River Hydro, LLC to jointly develop, own and operate the plant.

The Taylor Park Dam was built in 1937 and was originally designed to incorporate a hydroelectric facility at a later date, explained Feier. The Bureau of Reclamation owns the facility and has awarded a Lease of Power Privilege to Taylor River Hydro, LLC. to get the hydroelectric project running.

"What's really made this project possible is our partnership with UVWUA," said Feier. "We've spent a long time developing that relationship and it's critical to this project's success."

The new 500 kW turbine generator will be mounted at the base of the Taylor Dam and is designed to run 24 hours a day, seven days a week, 365 days a year. "It's really advantageous in that sense. It will always have enough flow to generate electricity, even in the winter," explained Feier. "That's about as maximum as we can handle on our existing infrastructure there in the canyon. But it does set the stage for an expansion at a future date where we could upgrade the line."

"Hydro also has a very good track record of producing for very long periods of time. There are hydro facilities that have been running for 100+ years," said Feier.

The project is also very cost effective in terms of kWh produced, versus a solar project, explained GCEA CEO Mike McBride. Even though it is a small generator, it would produce about the same amount of energy annually as some 2,500 kW fixed-tilt solar arrays. "Another advantage of this renewable project is it's not intermittent, as is solar. Because this produces around the clock it's a very good resource for us," he said.

The total estimated cost of the project is \$3.2 million. GCEA is currently 60% into the design phase and is putting together a design proposal that will be submitted to the Bureau of Reclamation by July 22. GCEA is also working on a grant request to the Bureau of Reclamation WaterSMART grant for \$1.6 million toward the project.

"We intend to have the 100% final approved design done by the end of 2022," said Feier. The target would then be to break ground on the project in May 2023. "We're hoping we can have it operational by November 2023 and generating power by the end of 2023."

The hydro project will be another resource as GCEA continues to diversify its supply portfolio with renewable and sustainable resources. GCEA is working on the Sunshine Park solar project just south of Crested Butte, and is also pursuing another community garden solar project in addition to its two existing locations at the Crested Butte wastewater treatment plant and at the GCEA headquarters in Gunnison.

"We'll be very close to 7% of our power supply being produced locally once Taylor and these two solar projects are completed," said McBride. The other 93% comes from GCEA's electrical supplier Tri-State Generation and Transmission Association, Inc.

"We are relying on Tri-State for a large portion of our strategy with respect to the energy transition and climate action because there's so much more that they can do, and much more cost effectively, than we can. They're on a path to increase their renewable energy and making a lot of progress." Tri-State is aiming

to be 50% renewable by 2024, 70% renewable by 2030, and achieve an 80% carbon reduction from their 2005 level by 2030.

To learn more about GCEA's renewable energy programs, visit www.gcea.coop.



#### **Sue Uerling**

From: Water Education Colorado <info@wateredco.org>

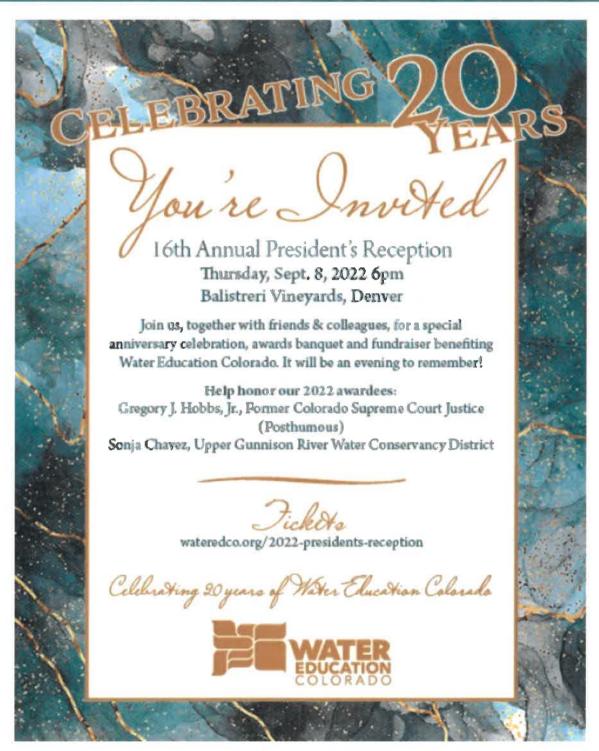
Sent: Friday, August 5, 2022 1:12 PM

To: Sue Uerling

**Subject:** Tickets now on sale: Get your tickets to the 2022 President's Reception now!

Join us in Denver on Sept. 8th!

View in your browser





## **Emerging Leader Award Sonja Chavez**

General Manager of the Upper Gunnison River Water Conservancy District Sonja Chavez has been an instrumental leader for water on the Western Slope, has worked to advance equity in water, serves on the Gunnison Basin Roundtable, and more. Help us celebrate her growing leadership at this year's event.

## This could be you, celebrating and networking at this year's President's Reception!



Sponsorship opportunities are available! Support our mission and treat your staff, colleagues and clients to a night of celebration in the name of Colorado water.

Learn more about <u>sponsorship</u> by contacting Kendra Longworth at <u>kendra@wateredco.org</u>

Thanks to our 2022 Reception sponsors!

## **AGENDA ITEM 11**

**Citizen Comments** 

## **AGENDA ITEM 12**

**Future Meetings** 

## **FUTURE MEETINGS/EVENTS**

- ▶ Labor Day Holiday Offices Closed September 5, 2022
- ▶ TLUG Meeting September 8, 2022 at 10 AM
- Sonja receives WECO's "Emerging Leader Award" September 8, 2022 at 6 PM at Balesteri Vineyards, Denver
- Watershed Management Planning Meeting September 14, 2022 at 1:30
   PM
- ▶ Gunnison Basin Roundtable Meeting September 19, 2022 at 3 PM
- ▶ UGRWCD Board Meeting September 26, 2022 at 5:30 PM LOCATION TO BE ANNOUNCED
- Watershed Management Planning Meeting October 12, 2022 at 1:30
   PM
- ▶ UGRWCD Board Meeting October 24, 2022 at 5:30 PM

## **AGENDA ITEM 13**

**Summary of Action Items** 

## **AGENDA ITEM 14**

Adjournment