The Southwestern Water Conservation District
The West Building, 841 E Second Avenue
Durango, CO 81301

NOTICE IS HEREBY GIVEN
A Board work session and
Regular Board Meeting of the
Southwestern Water Conservation District
will be held **via zoom only**.

Tuesday, January 17, 2023
Starting at 12:30 PM
and
Wednesday, January 18, 2023
Starting at 8:30 AM

Click here to join Zoom
Phone Number: (346) 248 7799
Meeting ID: 835 9975 3537
No Participant ID
Password: 474186

Posted and Noticed on January 16, 2023

Tentative Agenda

Please note – Due to weather/travel conditions, this meeting will be held via zoom only. No in-person attendance.

*Please text 307-630-1396 if you have difficulty joining the meeting. Please raise your hand to be recognized by the chair. To raise your hand by phone, dial*9. To raise your hand by computer, please use Alt+Y (Windows) or Option+Y (Mac). To mute and unmute by phone, dial *6.*

Except the time indicated for when the meeting is scheduled to begin, the times noted for each agenda item are estimates and subject to change. The Board may address and act on agenda items in any order to accommodate the needs of the Board and the audience. Agenda items can also be added during the work session or meeting at the direction of the Board.

No formal actions will be taken by the Board during the works session scheduled on Tuesday, January 17. This time is for open discussion of the listed topics by the Board. Public comments will be taken during this time.

Agenda items may be placed on the Consent Agenda when the recommended action is non-controversial. The Consent Agenda may be voted on without reading or discussing individual items. Any Board member may request clarification about items on the Consent Agenda. The Board may remove items from the Consent Agenda at their discretion for further discussion.

Tuesday, January 17, 2023

1.0 Call to Order – Roll Call, Verification of Quorum (12:30 PM)

2.0 Review and Approve Agenda (12:32 PM)

3.0 SWCD Board of Director Appointments for Archuleta, Montezuma and San Miguel Counties (12:33 PM)

4.0 Election of SWCD Board Officers (12:35 PM)

5.0 Executive Session (1:00 PM)

- **5.1** Colorado River Compact, Interstate and Intrastate negotiation matters, including immediate operations and renegotiation of the interim guidelines
- **5.2** Potential Extension of CRS 37-92-305(3)(c) to Water Users in Division 7
- **5.3** Application of Rehoboth Land Partners for Change of Water Rights, Case No. 19CW3045, Water Division 4
- **5.4** Personnel Matter – Update on Hiring new Programs Coordinator and consideration of SWCD additional hiring needs

6.0 Summary and Action Items from Executive Session (2:55 PM)

7.0 Adjourn from Regular Board Meeting (3:00 PM)

Break

8.0 SWCD Board Work Session and Public Comment (No formal action to be taken) (3:15 PM)

A. Colorado River Issues
   a. Colorado River Basin 24-month Study
   b. Update on SEIS

B. Water Conservation Activities
   a. Update on SCPP
   b. Potential Extension of CRS 37-92-305(3)(c) to Water Users in Division 7

C. Director Updates and Issues for Discussion

Wednesday, January 18, 2023

9.0 Call to Order – Roll Call, Verification of Quorum (8:30 AM)

10.0 Review and Approve Agenda (8:32 AM)

11.0 Questions and Comments from Audience (8:35 AM)

12.0 Consent Agenda (8:45 AM)

- **12.1** Resolution 2023-1 Designation of Meeting Posting Location
- **12.2** Acceptance of Treasurer's Report

12.3 Proposed assignment of a portion of the previous year's fund balance

13.0 SWCD Grant Program (9:00 AM)

13.1 2022 Grant Program Summary Report

13.2 Review of SWCD Grant Program Criteria

13.3 2023 SWCD Grant Application Presentations **(9:15 AM)**

Water Supply/Watershed Restoration

Florida Consolidated Ditch Co	*West Lateral Repair*
Summit Reservoir and Irrigation Co	*Turkey Creek Ditch Rehabilitation*
RiversEdge West	*Dolores River Restoration*
Trout Unlimited; Upper San Juan WEP	*Pagosa Gateway Project*

Public Forums, Studies, Planning, Workgroups

Mountain Studies Institute	*San Juan Mountains Snowtography Study*
San Miguel Watershed Coalition	*Integrated Modeling*
Mancos Conservation District	*Community Consensus Institute Workshops*
SJCRDC; Bonita Peak CAG	*Animas River Data Collection & Analysis*

Educational Seminars, Workshops, Programming

Fort Lewis College, KSUT & RMPBS	*Tribal Water Media Fellowship*
SJ Basin Archaeological Society	*Water in the Ancient World Conference*
Montezuma Land Conservancy	*Water Education at Fozzie's Farm*

13.4 2023 SWCD Grant Applications Decisions **(10:15 AM)**

13.5 Board & Staff Feedback on Grant Program Process & Criteria **(10:30 AM)**

BREAK (10:45 AM)

14.0 Legislative Affairs (11:00 AM)

14.1 Federal Affairs Update – Christine Arbogast

14.2 State Legislative Update & Positions on Bills – Garin Vorthmann

14.2.1 Continued Consideration and Potential Action on Supporting the Extension of CRS 37-92-305(3)(c) to Division 7

14.2.1.1 Public Comment

15.0 Reports (11:30 AM)

15.1 Hydrologic Conditions, updates from the Division Engineers for Water Divisions 4 and 7 – Bob Hurford and Rob Genualdi

15.2 Water Information Program Report - Elaine

15.3 Upper Colorado & San Juan River Basin Recovery Implementation Programs - Carrie

15.4 Update on Water Quality Matters – Peter Butler

16.0 General Counsel Legal Report (Noon)

16.1 Application of Rehoboth Land Partners for Change of Water Rights, Case No. 19CW3045, Water Division 4

17.0 Executive Session (as needed) (12:30 PM)

18.0 Adjournment (1:00 p.m.)

Upcoming Meetings

Thursday, February 2, 2023	Noon	Special Board Meeting (Legislative Affairs)
Thursday, February 16, 2023	Noon	Special Board Meeting (Legislative Update)
Thursday, March 2, 2023	Noon	Special Board Meeting (Legislative Update)
Thursday, March 16, 2023	Noon	Special Board Meeting (Legislative Update)
Thursday, March 30, 2023	Noon	Special Board Meeting (Legislative Update)
Friday, March 31, 2023	All day	SWCD's Southwest Seminar, Ignacio
Thursday – Friday, April 12 – 13. 2023		SWCD Regular Board Meeting
Thursday, April 27, 2023	Noon	Special Board Meeting (Legislative Update)

Regular Board Meeting
Legislative Update Calls - Noon
Annual Water Seminar
Budget Workshop
Holidays - Office Closed

SWCD - 2023 Calendar

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THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters in the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
West Building – 841 East Second Avenue
DURANGO, COLORADO 81301
(970) 247-1302

BOARD MEMORANDUM

From: **Steve Wolff, General Manager**
Beth Van Vurst, General Counsel

Subject: **Officer Elections**

Date: **9 January, 2023**

As is required by our enabling act, the Board needs to hold officer elections at the beginning of our January meeting. Officer elections will be held early on the first day, Tuesday, of your two-day board meeting. The process outlined below is essentially the same SWCD has used in previous years with in-person meetings. The process seemed to provide for elections that were both respectful and efficient. This will all occur in open session but your nomination, your vote and the vote count is confidential. All nominations and elections will be held via paper ballot, and Beth will be the only one to see each ballot. Beth has confirmed that the Colorado Open Meetings statute allows for confidential nominations and voting for officers.

At the Meeting:

Elections will occur shortly after the meeting begins on Tuesday. You will vote for president first. The chair will open the floor for nominations for president. Nominations, including any self-nominations, will then take place via paper ballot. No second is required for a nomination. Who made a nomination as well as the number of nominations for an individual will remain confidential; only one nomination is required to hold a vote. Beth will announce publicly the nominations for president and then will then confirm that nominee(s) is/are willing to serve in the office. If there is only one nominee for president, then that individual may simply be elected by acclamation upon a motion from one of the other board members. If there is more than one nominee, we will move into a confidential voting process. Beth will tabulate your votes and announce publicly the new president but not the vote count.

If there is more than one candidate for president and no one receives a majority of the votes, we will then have a runoff between the top two vote getters following the same voting procedure, and the winner will be announced. In the event of a tie vote, Beth will share publicly the tied

individuals and allow the tied nominees to address the board, then ask for a new vote. Each office will require a majority vote of the quorum present.

After electing the president, the gavel will pass to the new president, and we will follow the same procedure for vice president and then secretary-treasurer. Again, Beth will receive and count your nominations and votes. An unsuccessful nominee for one office may be a nominee for another office.

2023-01

RESOLUTION
BOARD OF DIRECTORS OF
SOUTHWESTERN WATER CONSERVATION DISTRICT

WHEREAS, pursuant to C.R.S. 24-6-402(2)(c): The Board of Directors ("Board") of the Southwestern Water Conservation District ("District") is charged with designating at its first regular meeting each year the public place or places for posting the notices of District meetings.

WHEREAS, notices for the meetings of the District have traditionally been posted on the doors of the District offices located at 841 East Second Avenue, Durango, Colorado, 81301.

NOW, THEREFORE, BE IT RESOLVED that the Board at its first regular board meeting held on January 17-18, 2023, at its principal place of business in Durango, Colorado, there being a quorum present, designated the doors of the District office located at 841 East Second Avenue, Durango, Colorado, as the public place for posting notices of the meetings of the District for 2023. The District will also endeavor, to the extent reasonably practicable, to post such notices on the District's website (swwcd.org).

DATED this 18th day of January 2023.

SOUTHWESTERN WATER CONSERVATION DISTRICT

By: _____
Jenny Russell, President

By: _____
Charles Smith, Secretary-Treasurer

Passed by a vote of _____ to _____.

WORKSHOP

Document: C.R.S. 37-92-305

C.R.S. 37-92-305

Copy Citation

37-92-305. Standards with respect to rulings of the referee and decisions of the water judge - definitions.

(1) In the determination of a water right the priority date awarded shall be that date on which the appropriation was initiated if the appropriation was completed with reasonable diligence. If the appropriation was not completed with reasonable diligence following the initiation thereof, then the priority date thereof shall be that date from which the appropriation was completed with reasonable diligence.

(2) Subject to the provisions of this article, a particular means or point of diversion of a water right may also serve as a point or means of diversion for another water right.

(3)

(a) A change of water right, implementation of a rotational crop management contract, or plan for augmentation, including water exchange project, shall be approved if such change, contract, or plan will not injuriously affect the owner of or persons entitled to use water under a vested water right or a decreed conditional water right. In cases in which a statement of opposition has been filed, the applicant shall provide to the referee or to the water judge, as the case may be, a proposed ruling or decree to prevent such injurious effect in advance of any hearing on the merits of the application, and notice of such proposed ruling or decree shall be provided to all parties who have entered the proceedings. If it is determined that the proposed change, contract, or plan as presented in the application and the proposed ruling or decree would cause such injurious effect, the referee or the water judge, as the case may be,

shall afford the applicant or any person opposed to the application an opportunity to propose terms or conditions that would prevent such injurious effect.

(b) Decrees for changes of water rights that implement a contract or agreement for a lease, loan, or donation of water, water rights, or interests in water to the Colorado water conservation board for instream flow use under section 37-92-102 (3)(b) shall provide that the board or the lessor, lender, or donor of the water may bring about beneficial use of the historical consumptive use of the changed water right downstream of the instream flow reach as fully consumable reusable water, subject to such terms and conditions as the water court deems necessary to prevent injury to vested water rights or decreed conditional water rights.

(c) In determining the amount of historical consumptive use for a water right in division 1, 2, 3, 4, 5, or 6, the water judge shall not consider any decrease in use resulting from the following:

(I) The land on which the water from the water right has been historically applied is enrolled under a federal land conservation program; or

(II) The nonuse or decrease in use of the water from the water right by its owner for a maximum of five years in any consecutive ten-year period as a result of participation in:

(A) A water conservation program, including a pilot program, approved in advance by a water conservation district, water district, water authority, or water conservancy district for lands that are within the entity's jurisdictional boundaries or by a state agency with explicit statutory jurisdiction over water conservation or water rights;

(B) A water conservation program, including a pilot program, established through formal written action or ordinance by a water district, water authority, or municipality or its municipal water supplier for lands that are within the entity's jurisdictional boundaries;

(C) An approved land fallowing program as provided by law in order to conserve water or to provide water for compact compliance; or

(D) A water banking program as provided by law.

(d) Quantification of the historical consumptive use of a water right must be based on an analysis of the actual historical use of the water right for its decreed purposes during a representative study period that includes wet years, dry years, and average years. The representative study period:

(I) Must not include undecreed use of the subject water right; and

(II) Need not include every year of the entire history of the subject water right.

(e) If an application is for a change of that portion of a water right for which a previous change of water right has been judicially approved and for which the historical consumptive use was previously quantified, the water judge shall not reconsider or requantify the historical consumptive use. However, the water judge may, without requantifying the historical consumptive use, impose such terms and conditions on the future use of that portion of the water right that is the subject of the change as needed to limit the future consumptive use of that portion of the water right to the previously quantified historical consumptive use.

(3.5) Applications for a simple change in a surface point of diversion.

(a) For purposes of this subsection (3.5):

SOUTHERN NEVADA
WATER AUTHORITY

STATE OF NEVADA

COLORADO RIVER COMMISSION
OF NEVADA

December 20, 2022

The Honorable Tanya Trujillo
Assistant Secretary, Water & Science
U. S. Department of the Interior
Washington, DC 20240

Re: Notice of Intent to Prepare a Supplemental Environmental Impact Statement

Dear Assistant Secretary Trujillo:

Over the past 20 years, the Southern Nevada Water Authority (Authority) has been a leader in conserving Colorado River water supplies and planning for a future with less water. The majority of Nevada's 300,000 acre-foot allocation is used within the Authority's service area and makes up 90 percent of the water supply for 2.3 million Nevadans (approximately 70 percent of our state's population) and the more than 42,000,000 people that visit Las Vegas each year. By investing in conservation programs and anticipating future water-supply problems, Nevada has reduced its consumptive use by almost 100,000 acre-feet per year (afy) over the last 20 years, despite adding approximately 750,000 people. The Authority and Colorado River Commission of Nevada (CRCNV) (collectively, "Nevada") further recognize that there is simply far less water for use in the Colorado River Basin (Basin) than has been allocated. This imbalance must be addressed, which will require reductions in use by all water users in all sectors. Nevada is committed to working with the other states, the country of Mexico, and various other stakeholders and water users to achieve an equitable and sustainable water-use and operations solution for the Basin.

On November 17, 2022, the Bureau of Reclamation (Reclamation), under the Department of the Interior's (Interior) direction, issued a Notice of Intent To Prepare a Supplemental Environmental Impact Statement for December 2007 Record of Decision Entitled Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations For Lake Powell and Lake Mead (Notice). 87 FR 69043 (November 17, 2022) (collectively referred to as "SEIS" or "2007 Guidelines" for the existing operations under the preceding Record of Decision). Nevada appreciates and supports this effort to act quickly to stabilize the Colorado River through modified reservoir operations and reductions in consumptive uses. The Notice identifies the need for a SEIS that is directed at three sections of the 2007 Guidelines – specifically Section 2(D) (Determination of Lake Mead Operation under Shortage Conditions), Section 6 (the Coordinated Operation of Lake Powell and Lake Mead as to the Mid-Elevation Release and Lower Elevation Balancing tiers), and Section 7(C) (Implementation of Guidelines concerning the Mid-Year Review). The Notice also

states that the "Department currently lacks analyzed alternatives and measures that may be necessary to address such projected conditions," while identifying "Preliminary Alternatives." These are described as (1) No Action, (2) Framework Agreement Alternative, and (3) Reservoir Operations Alternative.

Through separate correspondence, the Authority has joined Central Arizona Water Conservation District (CAWCD) and The Metropolitan Water District of Southern California (MWD) to elaborate on specific concerns and unidentified consequences. Nevada offers the following comments and proposed Framework Agreement Alternative for Reclamation to consider for this SEIS.

Urgency in Adopting New and/or Modified Management Actions

At the time the 2007 Guidelines were developed, water managers were just beginning to quantify the impacts of climate change and warming temperatures on the Basin. Since that time, numerous scientists, academia, and agency staff have all concluded the future of the Colorado River is significantly hotter and drier than the hydrology used to arrive at the shortage reductions in the 2007 Guidelines. The primary hydrology used in the 2007 Guidelines was based on an average natural flow at Lees Ferry of 15.07 million acre-feet (maf)[1]. From 2000 to 2022, the average annual natural flow was approximately 12.19 maf[2], representing an annual reduction in supply of more than 12 times Nevada's current Colorado River use. Furthermore, recent studies suggest the Basin may continue to warm by 2.5 to 5 degrees Fahrenheit by mid-century[3] and each degree of warming represents approximately a 5 percent decrease in runoff. Observed intervening inflows significantly below the range of uncertainty of the analyzed hydrology combined with water use that has exceeded the natural supply has pushed the river to a breaking point. Reclamation modeling shows that within the next 3 years the status quo could result in losses of critical federal infrastructure, uncertainty in the ability to release water from Lake Powell to Lake Mead, and significant hydropower impacts — particularly for grid stability and more acutely for small power users that rely heavily on hydropower, and unpredictable timing and scale of future shortages — undermining a key objective in the development of the original 2007 Guidelines. Reclamation must act as swiftly as possible if the water users that are reliant upon the Colorado River are to have any certainty regarding the magnitude and quantity of future water use, even in the short term. Understanding the magnitude and timing of water supply reductions is critical to successfully managing water resource portfolios and ensuring reliable water delivery to customers. Failing to act in 2023 to further reduce water use could result in the loss of over 1.97 maf of reservoir storage in Lake Mead, a 30 foot vertical decline. And if Lake Powell's release is reduced to protect the ability to release water through the power plant, the reduction in Lake Mead could be 5.36 maf, a 70 foot vertical decline[4]. These declines represent the loss of large volumes of critical reservoir storage that will not be easily refilled. Further depletion of reservoir storage is directly increasing risk and uncertainty about future supply reliability.

Scope

The scope of the SEIS should not be substantively different from that of the 2007 Guidelines. The three sections identified by Reclamation fundamentally form the basis of actions that can be implemented in a

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[1] Final EIS-Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead: Volume I, Chapter 3 – Affected Environment, U.S Bureau of Reclamation, October 2007.

[2] Provisional Natural Flow Data 1906-2022 Based on April, 2022 24-Month Study, Accessed May 2, 2022.

[3] Lukas, Jeff, and Elizabeth Payton, eds. 2020. Colorado River Basin Climate and Hydrology: State of the Science. Western Water Assessment, University of Colorado Boulder. DOI: https://doi.org/10.25810/3hcv-w477.

[4] Notice of Intent to Prepare a Supplemental Environmental Impact Statement, 80% ESP Analysis – 2002 to 2005 Trace, Public Information Webinar per 87 FR 69042, November 29, 2022. Presentation available at: https://www.usbr.gov/ColoradoRiverBasin/SEIS.html.

timely matter to meet the current crisis. While broader, and more inclusive, operating regimes are desired by many in the Basin, neither the 40,000,000 people that depend upon Colorado River water nor the environment through which it flows can afford to wait the several years it takes to negotiate such matters.

While not altering the scope of the SEIS, there are numerous complimentary actions that should be taken within the Basin to bolster the effectiveness of the 2007 Guidelines. The actions identified in the Drought Contingency Plans, the System Conservation Pilot Program, the 500+ Plan, and the Upper Basin's Five Point Plan all contribute to the stability of reservoir elevations. Their collective and interrelated nature require sufficient and accurate modeling to understand the range of impacts of the action alternatives that will be proposed in the SEIS.

Finally, other methods that help secure the water supply of the Basin have been proposed by Reclamation, Nevada, and others. These additional actions should be pursued with alacrity and in parallel with the operational changes contemplated by the SEIS. These include beneficial use definitions and determinations under 43 C.F.R. Part 417 (Procedural Methods for Implementing Colorado River Water Conservation Measures with Lower Basin Contractors and Others). It is well past time to prohibit the inefficient delivery, application, or use of water within all sectors and by all users; there simply is no water in the Colorado River System left to waste and each industrial, municipal, and agricultural user should be held to the highest industry standards in handling, using, and disposing of water. We further request that Reclamation act on the items articulated in the Authority's August 15, 2022, letter to Secretary of Interior Haaland, Assistant Secretary Trujillo, and Commissioner Touton[5]. It is critical that Reclamation pursue all options that will help reduce consumptive uses in the Basin and provide water supply reliability. To that end, Nevada strongly encourages Reclamation to immediately begin independent NEPA and ESA compliance for these activities.

Hydrology

The fundamental driver for the SEIS is changed hydrology. The success of the SEIS in curtailing future risk, balancing reservoir elevations, and protecting the water supply of 40 million people will depend on evaluating potential alternatives against hydrologic scenarios that encompasses the full range of future hydrologic risk, specifically including sequences of drier than observed historical flows. Nevada's internal modeling with the Colorado River Simulation System Model uses a Direct Natural Flow adjusted to an annual average of 11.0 maf, compared to the observed annual average of 14.7 maf. Reclamation has recently used 80 percent of the ensemble stream flow projections for modeling with the Colorado River Mid-term Operations Model. Using the appropriate tools and hydrologic assumptions will help ensure that the full range of risk is analyzed.

Operational Objectives

The purposes of the 2007 Guidelines as described in Section 4 of the Record of Decision are to:

- improve Reclamation's management of the Colorado River by considering trade-offs between the frequency and magnitude of reductions of water deliveries, and considering the effects on water storage in Lake Powell and Lake Mead, and on water supply, power production, recreation, and other environmental resources;

[5] Letter from Southern Nevada Water Authority General Manager John J. Entsminger to Secretary of Interior Debra Haaland, Assistant Secretary for Water and Science Tanya Trujillo, and Commissioner of the Bureau of Reclamation Camille Calimlim Touton, Dated August 15, 2022.

- provide mainstream United States users of Colorado River water, particularly those in the Lower Division states, a greater degree of predictability with respect to the amount of annual water deliveries in future years, particularly under drought and low reservoir conditions; and
- provide additional mechanisms for the storage and delivery of water supplies in Lake Mead to increase the flexibility of meeting water use needs from Lake Mead, particularly under drought and low reservoir conditions.

These objectives have not changed and continue to drive the need for the SEIS. Water supply and future operational certainty are paramount for water users, particularly our highly populated, river dependent urban areas. In order to successfully manage a water resource portfolio, water managers need to understand how and when water supplies will be reduced. Reducing available water supplies with little or no notice and predictability is significantly more likely to create economic disruptions. The Lower Colorado River Basin and the communities that the river serves are some of the most urbanized and arid regions of the United States. Nevada offers the following operational objectives for inclusion in the SEIS as a direct response to changed hydrology, operating Lake Powell and Lake Mead at levels previously uncontemplated, and to protect the water supply for the 40 million people that rely on the river for municipal use.

Ensure water can be released from Glen Canyon Dam

Reclamation has offered several presentations and briefings on risks associated with losing the ability to release water through the Glen Canyon Dam power plants. These risks fundamentally harm water supply reliability for all those that rely upon water in the Lower Basin. The inability to reliably release water from Glen Canyon Dam imposes unacceptable risk to Lower Basin water supply and the predictability of that supply. These risks are well documented and well understood in the exchange of letters between Assistant Secretary for Water and Science, Tanya Trujillo, and the Seven Basin States that occurred in April and May of 2022[6].

Any preferred alternative must ensure water deliveries from Glen Canyon Dam are not compromised, in turn requiring that sufficient elevations be maintained in Lake Powell.

Protection of ICS

Modifications to the 2007 Guidelines must uphold the contractual commitments of the Secretary of Interior to only deliver Intentionally Created Surplus (ICS) to the party that created such ICS. Many contractors, including the Authority, have spent years and invested hundreds of millions of dollars to conserve water that has helped to keep Lake Mead elevations higher than they otherwise would have been through the creation of ICS. Currently, ICS accounts for approximately 51 feet of Lake Mead's elevation. This storage must be preserved for the agencies that stored it.

Furthermore, under extremely limited circumstances, ICS that is stored in Lake Mead should be made available when Lake Mead is below elevation 1,025 feet to the contractor that stored the water if sufficient protections can be provided to satisfy the public health, safety, and welfare needs described below.

[6] Letter from Assistant Secretary for Water and Science Tanya Trujillo to Governor's Representative for State of Nevada John J. Entsminger dated April 8, 2022; Letter from Colorado River Basin States Representatives of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming to Assistant Secretary for Water and Science Tanya Trujillo dated April 22, 2022; and Letter from Assistant Secretary for Water and Science Tanya Trujillo to Governor's Representative for State of Nevada John J. Entsminger dated May 3, 2022

Protection of water supply for public health, safety, and welfare

Given the risk identified by Reclamation's recent modeling that Lakes Mead and Powell will decline below their respective power pools, and the consequent risk to public health, safety, and welfare, the preferred alternative should protect sufficient storage in Lake Mead to ensure that 18 months of deliveries necessary to meet public health, safety, and welfare can be made by Reclamation. As noted in the Notice:

> [T]he Department has concluded that immediate development of additional operational alternatives and measures for Lake Powell and Lake Mead are necessary to ensure continued "operations that are prudent or necessary for safety of dams, public health and safety, other emergency situations …" 2007 Interim Guidelines at Section 7.D. 87 FR 69044

For domestic uses, the river in the Lower Basin provides water to approximately 27 million people. For some of these communities, the Colorado River is their exclusive source of water, or other domestic sources are insufficient to cover public health, safety, and welfare needs. It is imperative that these water supplies are offered the highest protection under the preferred alternative.

Reclamation should also consider the impact of further reductions in hydropower generation on the regional electric grid. A reliable supply of electricity is an important element in public health, safety, and welfare considerations. Electric supply is decreasing, particularly in the Southwest region. Impacts to hydropower generation should therefore be considered under any alternative, as this resource staves off energy emergencies, limits critical outages, and helps stabilize the grid. Accordingly, CRCNV has provided more detailed comments in **Attachment 1**.

Related actions and considerations

Inclusion of Mexico

Mexico has been a progressive and dependable partner to the United States and Colorado River water users within the United States even as the worsening supply/demand imbalance has depleted storage within the system. In 2017's Minute 323 to the "United States-Mexico Treaty on Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande" signed February 3, 1944 ("1944 Water Treaty") for example, the United States and Mexico agreed on the "importance of aligning operations for both countries" and the need for their respective "governments and stakeholders to seek mechanisms to avoid reaching critically low reservoir elevations." Glen Canyon dam's infrastructure is currently threatened by significantly reduced inflows over the past two decades, in turn threatening to make deliveries to users in the Lower Basin difficult or impossible. Accordingly, the proposed Framework Agreement Alternative discussed below and in Attachment 2 hereto contemplates continued alignment of operations for users in both countries. Specifically, while the Tier 3 shortage volumes discussed below as a replacement for Section 2.D.1 of the 2007 Guidelines (500,000 combined acre-feet when Lake Mead is below 1,090 feet) do not expressly signal a revised shortage volume for Mexico to stay within the scope of the SEIS, to maintain alignment between the two countries Mexico's allocation would not exceed 1.375 maf when Lake Mead is below 1,090 feet and the overall Lower Basin allocation would not exceed 8.375 maf. Similarly, Mexico's Binational Water Scarcity Plan storage requirements set forth within Section IV of Minute 323 would be made as if Lake Mead is below 1,030 feet anytime Lake Mead is below 1,090 feet. And finally, Attachment 2 (discussing the assessment of evaporation and system losses to Lower Basin users) contemplates that such losses would be equitably assessed to all users, including Mexico.

Compliance

The Lower Colorado River Multi-Species Conservation Program provides Endangered Species Act compliance for operations of the Lower Colorado River, including water deliveries and hydropower. The actions contemplated in the preferred alternative will likely necessitate expanded compliance for lower Lake Mead elevations and reduced deliveries to all water users, including reductions to only those volumes necessary to meet public health, safety, and welfare requirements. It is imperative this compliance moves swiftly and in parallel with this SEIS.

Proposed Framework Agreement Alternative

This section introduces an alternative developed by the Authority to meet the stated "purpose" (modifying the operating guidelines to address drought and aridity) and "need" (avoiding critically low elevations) identified in the SEIS. The alternatives demonstrate how the system can effectively and safely operate through more restrictive shortage conditions (at 1,090 feet), equitable sharing of evaporation and system losses, continued DROA actions and additional reductions in use in the Upper Basin. The Authority believes these actions are implementable under this federal action, previous related federal actions and federal law. While the magnitude of water use reduction is striking, it is necessary, achievable, equitable, and effective.

The elements of this proposed alternative are articulated below.

Lower Basin Shortage

Section 2.D.1 of the 2007 Guidelines shall be stricken and replaced with the following:

Deliveries to Lower Division States during Shortage Conditions shall be implemented in the following manner:

a. The Lake Mead Protection Elevation for the year shall be set at the live storage volume in Lake Mead that is equivalent to the sum of the quantity of water stored as ICS (including any applicable ICS, DCP ICS, and Mexican Water Reserve) and 18 months of public health, safety, and welfare requirements for the Lower Basin and Mexico's municipal water users.
b. In years when Lake Mead content is projected to be at or below elevation 1,090 feet but above the Lake Mead Protection Elevation, a quantity of up to 7.0 maf shall be apportioned for use in the Lower Division States, of which 2.32 maf shall be apportioned for use in Arizona, 280,000 af shall be apportioned for use in Nevada, and 4.4 maf shall be apportioned for use in California; provided, however, that if 7.0 maf cannot be apportioned to the Lower Division States without reducing Lake Mead's elevation to something below the Lake Mead Protection Elevation, then such amounts shall be reduced. This apportionment shall be dynamic throughout the calendar year and apportionments may be further reduced, but not increased from the initial determination made by the Secretary. Water deliveries for public health, safety, and welfare shall be prioritized.

Lower Basin Drought Contingency Plan Contributions

Lower Basin Drought Contingency Plan Contributions shall be made each year Lake Mead is at or below elevation 1,090 feet as if Lake Mead is at or below elevation 1,030 feet.

The corresponding reductions from this modification and the previous modifications for Lower Basin Shortages shall result in the reductions summarized in the table below.

Projected January 1 Lake Mead Elevation (feet msl)	**2007 Interim Shortage Guidelines Shortages**		**DCP Contributions**			**Combined Volumes** (2007 Interim Guidelines Shortages & DCP Contributions)			
	Arizona	**Nevada**	**Arizona**	**Nevada**	**California**	**Arizona**	**Nevada**	**California**	**Lower Division States Total**
	(thousand acre-feet)								
At or below 1,090 and above Lake Mead Protection Elevation	480	20	240	10	350	720	30	350	1,100

ICS Deliveries

Under Section 3.C, modifications should be made under extremely limited circumstances such that ICS that is stored in Lake Mead is available when Lake Mead is below elevation 1,025 feet to the contractor that stored the water if sufficient protections can be provided to satisfy the public health, safety, and welfare needs of municipal water users.

Evaporation and Storage Losses or Equivalent Equitable Reductions

Annually, the Secretary shall assess 1.543 maf of system losses in a manner that ensures water apportioned for use does not exceed the volume listed in modified section 2.D.1 above (including applicable DCP contributions) minus 1.543 maf per year. One equitable proposal is to use the methodology described in **Attachment 2** to this letter, noting that reductions are intended to apply to each individual water user based upon the user's recent history of consumptive use. Because these losses occur without regard to priority, they should NOT be implemented in a manner that applies reductions exclusively to junior priority users.

Modified releases from Glen Canyon Dam

Operational experience has shown the balancing releases identified in Section 6 of the 2007 Guidelines are not practical or achievable in the face of changing hydrologic conditions and the desired reliability of water releases from Glen Canyon Dam. This alternative proposes that the following changes be made to Section 6, including within the table entitled Lake Powell Operational Tiers.

- Section 6.B.1 and 6.B.4 shall be stricken
- Section 6.B.2 balancing releases shall be not more than 10.0 maf and not less than 8.0 maf
- Replace Section 6.C.1 with the following: In Water Years when the projected January 1 Lake Powell elevation is below 3,575 feet and at or above 3,550 feet, the Secretary shall release 7.48 maf from Lake Powell in the Water Year unless Lake Powell is projected to drop below elevation 3,510 feet in that Water Year. If Lake Powell is projected to drop below elevation 3,510 feet in that Water Year, releases shall be reduced to protect elevation 3,510 feet.
- Change Section 6.D title to Lower Elevation Release Tier
- Replace Section 6.D.1 with the following: In Water Years when the projected January 1 Lake Powell elevation is below 3,550 feet, the Secretary shall release 7.0 maf from Lake Powell unless Lake Powell is projected to drop below elevation 3,510 feet in that Water Year. If Lake Powell is

projected to drop below elevation 3,510 feet in that Water Year, releases shall be reduced to protect elevation 3,510 feet.

Upper Basin Actions

In addition to those actions previously articulated in the Upper Basin DCP and Five Point Plan, whenever Lake Powell is projected to begin a calendar year at or below elevation 3,550 feet, the following additional actions should occur: 1) the Upper Basin states shall collectively reduce water use by 500,000 af; and 2) the Secretary shall use emergency authorizations within applicable DROA Agreements and associated Records of Decision to ensure a 500,000 acre-foot release is made to Lake Powell to the extent sufficient water exists in upstream storage.

In conclusion, Nevada strongly desires that this alternative be further refined through cooperation with the other Colorado River Basins States and river stakeholders. However, given the lack of progress achieving consensus on these issues previously, we felt it prudent to introduce the concepts and framework that are necessary to stabilize reservoir elevations and provide increased water supply reliability to the desert southwest. Nevada continues to stand ready to work with any of our partners to refine this alternative as quickly as possible for immediate implementation.

Sincerely,

John J. Entsminger
Governor's Representative
State of Nevada
&
General Manager
Southern Nevada Water Authority

Eric P. Witkoski
Executive Director
Colorado River Commission of Nevada

cc: Camille Calimlim Touton, Commissioner, Bureau of Reclamation
David M. Palumbo, Deputy Commissioner-Operations, Bureau of Reclamation
Reclamation 2007 Interim Guidelines SEIS Project Manager, Upper Colorado River Basin Region
via email: CRinterimops@usbr.gov

Attachments

Attachment 1

The Colorado River Commission of Nevada ("CRCNV") is required to protect and safeguard the State of Nevada's allocation of Colorado River water and power resources granted to it by Congress. CRCNV has a significant interest in water matters impacting the Colorado River as well as hydropower resources from the Boulder Canyon Project, the Parker-Davis Generation Project, and the Salt Lake City Area Integrated Projects. The CRCNV provides hydropower from these projects to 23 contractors in southern Nevada including electric utilities (investor owned and public), municipalities, educational institutions, Nevada state agencies, and companies that produce goods and services.

Scope of the Analysis

The scope of the Bureau of Reclamation's ("Reclamation") analysis needs to consider the impact of further reductions in hydropower generation on the regional electric grid. Electricity is not a convenience good. It is a critical element of public health, safety, and welfare that is in short supply. Over the next few years, as demand on the electricity grid increases, energy supplies are expected to tighten even further.

During the past few years, the Western electric grid has demonstrated its vulnerability to energy shortages, particularly during the summer months when it is subject to extreme heat events and natural disasters such as wildfires. The region relies on hydropower resources on the Colorado River to support the reliability of the electric grid. As highlighted by the North American Reliability Corporation (NERC) in its Summer Reliability Assessment study for 2022:

> Energy output from hydro generators throughout most of the Western United States is being affected by widespread drought and below-normal snowpack. Dry hydrological conditions threaten the availability of hydroelectricity for transfers throughout the Western Interconnection. Some assessment areas, including WECC's California-Mexico (CA/MX) and Southwest Reserve Sharing Group (SRSG), depend on substantial electricity imports to meet demand on hot summer evenings and other times when variable energy resource (e.g., wind, solar) output is diminishing. In the event of wide-area extreme heat event, all U.S. assessment areas in the Western Interconnection are at risk of energy emergencies due to the limited supply of electricity available for transfer.

Hydropower resources have recently been called on to stave off energy emergencies like the ones referenced in the WECC report. Between August 14 and August 19 of 2020, Western Area Power Administration ("WAPA") and the Reclamation generated and transmitted additional hydropower energy in response to a heat-related energy emergency in the State of California. This action limited outages and helped stabilize the grid.

Hydropower has also been recently called on to respond to scarcity events exacerbated by regulatory and policy decisions affecting the electric grid's reliability. Under a Federal Energy Regulatory Commission Order, the State of California, during periods of high demand, can intercept electricity generated in the Pacific Northwest that would otherwise be delivered to other states, including Arizona and Nevada, during times when these states are also experiencing high demand for energy. See FERC Order Docket No. ER21-1790. The intercept of power by California that would otherwise have been imported to other States happened as recently as September of 2022, straining power deliveries into Nevada and Arizona. During these shortage events, both Glen Canyon Dam and Hoover Dam were called on to provide as much power as possible to avoid rolling blackouts in the region.

Ideally, the scope of Reclamation's analysis should be broad enough to allow for detailed technical studies to be completed that assess the impact of reduced hydropower resources on the reliability of the electric grid in the Colorado River Basin. The technical scope should focus on hydropower's contribution toward resource adequacy, possible impacts to the transmission grid, and the risk that load will go unserved in the region. Given the short time frame for this SEIS process and the pressing need to implement measures that protect the water and power resources on the river, there may not be sufficient time to conduct such detailed studies. In that case, Reclamation should, at a minimum, consult with a broad range of industry experts and review existing reports, data and information concerning the risk of resource shortages during the next few years. At a minimum, Reclamation should consult with WAPA about its ability to operate the electric grid under a reduced generation scenario as well as WAPA's ability to respond to regional emergencies. Reclamation should also carefully review technical reports and analyses already completed by reliability organizations such as the Western Electric Coordinating Council, grid operators such as the California Independent System Operator (CAISO), electricity suppliers, and other experts in the region.

The drought has already taken a major toll on WAPA's contractors financially, particularly customers that are heavily dependent on hydropower resources. These contractors are not only paying more per MWh for their resources, but they are also having to replace lost hydropower generation with more expensive resources, resulting in substantial annual rate increases. Ideally, the scope of this SEIS should address the financial impact of losing hydropower resources on WAPA's customers including the impact to resource rates and the cost to customers to replace lost hydropower generation with other resources. Once again, given the short time frame for this SEIS process, consultation with WAPA's contractors, particularly those that are heavily reliant on hydropower resources, is warranted.

Operational Considerations

Given the increasing demand for electricity and the need for energy in the region during 2023 and 2024, Reclamation needs to consider protecting the elevations of both Lake Powell and Lake Mead so that a reasonable amount of hydropower generation can be preserved. For every 25 feet further decline in elevation at Lake Mead, it is estimated that approximately 250,000 MWh of energy and 125 MW of capacity will be lost at Hoover Dam. This is in addition to the approximately 2.3 million MWh of energy that Hoover contractors have lost since the start of the drought.

Elevation 1,000 feet in Lake Mead is the minimum elevation for which the wide head turbines at Hoover Dam are rated and it is expected that approximately 1,000 MWs of capacity would remain available at that elevation. Although minimum power pool is believed to be 950 feet, it is important to recognize that we have no operating history at these lower lake elevations and a margin is needed to avoid possible technical difficulties that may arise at lower elevations. Further, at a level of 950 feet, Hoover generating capacity is expected to drop to 30 percent of rated capacity versus 50 percent of rated capacity at an elevation of 1,000 feet. Consequently, the amount of power that Hoover Dam provides and its contribution to Western Grid reliability is significantly reduced at an elevation of 950 feet. The ability to protect these elevations is a critical component of any preferred alternative and should be considered in the SEIS. CRCNV believes the proposed Nevada alternative will perform well for meeting these objectives.

Identification of Relevant Information and Studies

Reliable generation forecasts are important to Reclamation's customers. Utility managers need to have a thorough understanding of the range of generation outcomes (energy and capacity) at varying levels of Lake elevations and releases so that they can plan for different outcomes. During this SEIS, it is recommended that Reclamation model a wide range of operating alternatives and publish the

hydropower generation resulting from those model runs. This will allow utility managers to plan for the future and secure replacement resources if necessary.

As noted above, with the short period allotted for the SEIS and the need to take action sooner rather than later, the CRCNV recommends that Reclamation rely heavily on consultation with experts in the electric industry including WAPA, a cross section of WAPA's customers, particularly those that are heavily dependent on hydropower resources, energy suppliers, and grid operators as well as a review of existing data and information to fully understand the energy supply and demand picture for 2023 and 2024 and weigh the risk of further reductions in hydropower resources.

More detailed technical studies and analysis should be undertaken to inform future decisions. These studies should assess the impact of reduced hydropower resources on the reliability of the electric grid in the Colorado River Basin and focus on hydropower's contribution toward resource adequacy, possible impacts to the transmission grid, possible impacts to market power prices, and the risk that load will go unserved in the region. These studies should be conducted over a longer period and under different supply and demand scenarios. In addition, more analysis needs to be done to quantify the financial impact of losing hydropower generation on WAPA and WAPA's customers. This financial analysis should include future resource rate projections under a wide range of generation outcomes as well as a quantification of replacement costs considering all benefits hydropower provides, including energy, capacity, ancillary services, and renewable benefits.

Attachment 2

SNWA Methodology to Assessing Lower Basin System Losses

In the Lower Basin (LB), system losses occur primarily as open-water evaporation and riparian evapotranspiration (ET). From Lee's Ferry to the Northerly International Boundary (NIB), SNWA estimates these losses to be approximately 1.543 million acre-feet per year. SNWA's objective is to develop an equitable method of assessing these system losses to LB water users that rely on the reservoirs and river system for the storage and transmission of water deliveries. The general approach to estimate system-loss assessments consisted of the following:

1. System losses were estimated for five reaches along the Colorado River from Lee's Ferry to the NIB:

   Reach 1 Lee's Ferry to Hoover Dam
   Reach 2 Hoover Dam to Davis Dam
   Reach 3 Davis Dam to Parker Dam
   Reach 4 Parker Dam to Imperial Dam, and
   Reach 5 Imperial Dam to the NIB

2. For each reach, water user groups were assembled to represent the water users that rely on the reach to store and/or transmit water deliveries and their average annual consumptive uses were estimated. These users would share in the system loss estimated for the reach.

3. For each reach, the estimated system loss was assessed proportionally to each state and corresponding water users based on their fraction of the total water deliveries within the reach.

Reservoir evaporation for lakes Mead, Mojave and Havasu and riparian ET for downstream reaches were estimated based on input data and relationships used in the CRSS model (Version 5 release, January 2022). For Lake Mead, the reservoir elevation-evaporation relationship was used to estimate evaporation at an elevation of 1,100 feet. For lakes Mohave and Havasu, the reservoir evaporation was computed by multiplying the monthly evaporation rates by the monthly target reservoir elevations described in Appendix B of the Interim Guidelines FEIS[7]. Losses between Davis Dam and Parker Dam were computed by summing the input values for the monthly depletions of the "*Phreatophytes*" object. Similarly, losses between Parker and Imperial dams were computed using the "*Native Vegetation*" object, and losses between Imperial Dam and the NIB were computed using the "*Phreatophytes Imperial to NIB*" object. The total system loss for each reach was estimated by summing the reservoir evaporation, if the reach included a reservoir, and the losses by riparian ET.

[7] Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead – Final Environmental Impact Statement, U.S. Bureau of Reclamation, Lower Colorado River Region, Boulder City, NV, November 2007.

To assess system losses, the average annual consumptive use for each water user was computed for the period 2019-2021 using data reported in the USBR Decree Accounting Reports[8]. These values were used to estimate each state's proportion of water use within a given reach. Water user groups were formed by water user and state for each reach. A water user group represents all the water users who rely on a reach to store or transmit deliveries. So, a water user at the bottom of the system would rely on the storage and transmission of all five reaches and would have representation in all five water user groups. The water user groups were subdivided by state and state totals were computed for each reach.

State-assessment fractions were computed by dividing the total state consumptive use by the total consumptive use of the reach. State assessments were then computed by multiplying these fractions by the system loss estimated for the reach. State assessments were proportionally assigned to the individual water users of the corresponding state based on their proportion of the state's consumptive use for the reach.

The following tables represent summary assessments for each state and Mexico and the individual water user assessments for large water users. SNWA is happy to provide more detailed documentation and methodology upon request.

SUMMARY OF ASSESSMENTS BY STATE / MX

State	afy
AZ	401,018
CA	771,486
NV	17,570
MX	352,926
TOTAL	1,543,000

SUMMARY OF WATER USER ASSESSMENTS

Reach	State	Major Water Users	afy
1	NV	LVVWD/SNWA - SNWP	15,514
3	AZ	Central Arizona Water Conservation District	190,474
3	CA	The Metropolitan Water District of Southern California	110,464
4	AZ	AZ Colorado River Indian Reservation	45,378
4	AZ	Wellton-Mohawk I.D.D.	51,654
4	AZ	Yuma County Water Users' Association	47,611
4	AZ	Yuma Mesa I.D.D.	28,657
4	CA	Coachella Valley Water District	70,074
4	CA	Imperial Irrigation District	509,508
4	CA	Palo Verde Irrigation District	71,335
5	MX	Mexico	352,926
		Subtotal	***1,493,596***
Reach	**State**	**Remaining Water Users**	**afy**
All	AZ	Other Users in AZ	37,243
All	CA	Other Users in CA	10,105
All	NV	Other Users in NV	2,056
		Subtotal	***49,404***
		TOTAL	**1,543,000**

[1] Major users considered to have losses greater than 10,000 afy

[8] Lower Colorado River Water Accounting and Water Use Report: Arizona, California, and Nevada, Calendar Years 2019-2021, U.S. Bureau of Reclamation, Interior Region 8: Lower Colorado Basin, Boulder City, NV.

For Release: Dec. 14, 2022
Contact: Alyx Richards: 801-531-1150, arichards@ucrcommission.com

Upper Colorado River Commission and Reclamation Announce System Conservation Pilot Program Funding Opportunity for 2023 Water Conservation Projects in the Upper Colorado River Basin

The Upper Division States of Colorado, New Mexico, Utah, and Wyoming, acting through the Upper Colorado River Commission (UCRC), in partnership with the Bureau of Reclamation, announced their intent to launch a System Conservation Pilot Program (SCPP) for 2023. The SCPP is a key component of the Upper Division States' 5-Point Plan to address the impacts of the ongoing drought and depleted storage in the Upper Colorado River Basin. The 5-Point Plan was outlined by the UCRC in its July 18th letter to Reclamation Commissioner Camille Touton. The Request for Proposals for SCPP projects is a major milestone in implementing the actions outlined in the 5-Point Plan.

The UCRC is seeking proposals immediately for the voluntary, compensated, and temporary water conservation projects for 2023. The RFP is available here. Project proposals must be submitted by February 1, 2023. The Upper Division States and UCRC will review and select projects for implementation in 2023. The full implementation of the SCPP is contingent on the passage of pending legislation in Congress and the finalization of the SCPP funding agreement between the UCRC and Reclamation, approved by the UCRC on November 21, 2022. The goal is to have water conservation projects underway in April 2023 to reduce consumptive uses in the Upper Basin Colorado River system.

The SCPP is a significant step to begin to partially mitigate the water supply crisis in the Upper Colorado River Basin brought on by a drier climate and depleted storage. The SCPP will provide short-term reductions to reduce some impacts in the Upper Colorado River Basin. However, longer-term and durable solutions are needed to not only stabilize the system but to rebuild water supply resiliency in the Upper Colorado River Basin. The Upper Division States, individually and through the UCRC, are committed to working with water users, Tribes, NGOs, Reclamation, and other stakeholders to develop, fund, and implement new water conservation, recycling, and water efficiency projects that benefit the Upper Colorado River resources.

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UPPER COLORADO
RIVER COMMISSION
50 S. 600 E. Ste #100 • Salt Lake City, UT 84102 • 801-531-1150 • www.ucrcommission.com

TO: Interested Upper Basin Water Users
FROM: Upper Colorado River Commission
DATE: December 14, 2022
SUBJECT: Pre-Solicitation Notice of Request for Proposals regarding a potential funding opportunity for voluntary participation in a System Conservation Pilot Program for 2023

On June 14, 2022, the United States Bureau of Reclamation (BOR) outlined the need for an additional 2.0 – 4.0 MAF/year of contributions to Lake Powell and Lake Mead to avoid critically low reservoir levels. In response, the Upper Division States of Colorado, New Mexico, Utah, and Wyoming, acting through the Upper Colorado River Commission (UCRC),[1] adopted a 5-Point Plan to proactively support critical infrastructure and resources related to the Colorado River Storage Project Act Initial Units.[2] A key component of the 5-Point Plan is establishing a System Conservation Pilot Program (SCPP) beginning in 2023.[3] The purpose of the SCPP is to conserve Colorado River System water through temporary, voluntary, and compensated measures to mitigate the impacts of ongoing drought and depleted storage in the Upper Colorado River Basin.

The UCRC is issuing this Pre-Solicitation Notice of Request for Proposals (RFP) to invite users of Colorado River System water in the Upper Division States to submit proposals for SCPP water conservation projects. The UCRC is looking for projects that reduce consumptive use through temporary, compensated, and voluntary water savings actions in 2023. If the SCPP is authorized, then the information provided through this pre-solicitation will be used for selection in the 2023 program. Implementation of the SCPP is contingent upon the passage of pending federal legislation and final authorization from BOR.

A key consideration for selection in the 2023 program will be the cost of the proposed project in terms of price per acre-foot for conservation reductions. Project compensation will be based on one of the following:

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[1] The UCRC is an interstate administrative agency established by the Upper Colorado River Basin Compact of 1948 (Upper Basin Compact). UCRC members consist of a Commissioner representing each of the four Upper Division States of Colorado, New Mexico, Utah and Wyoming (Upper Division States) and a Commissioner appointed by the President of the United States. The UCRC assists the Upper Division States in developing their apportionments of Colorado River water pursuant to the Colorado River Compact of 1922 and the Upper Basin Compact, and has specific responsibilities to assist in implementing the Upper Basin Compact consistent with laws of the Upper Division States.

[2] The 5-Point Plan letter is available here: http://www.ucrcommission.com/wp-content/uploads/2022/07/2022-July-18-Letter-to-Reclamation.pdf.

[3] Previously, the UCRC, BOR, and the Upper Division States, along with funding entities conducted another system conservation pilot program from 2015 through 2018.

a. A proposal that accepts a fixed price of $150 per acre-foot of water conserved (Fixed Price); or

b. A proposal that requests a per acre-foot price that differs from the Fixed Price. Project Proponents seeking a price that differs from the Fixed Price must provide the basis and justification for their proposed price.

Municipal, Industrial, and agricultural water users are invited to submit a Proposal describing a conservation project that can be implemented in 2023 under this Pilot Program by you or your organization. Proposals should include a detailed project description, the estimated amount of consumptive use that will be conserved as a result of the proposal, a proposed plan for verifying the conservation activities employed, the approximate time frame for a startup, project duration, the amount of funding requested and justification of non-fixed price proposals, and additional information as requested on the application form. The application form will be available for download from the UCRC webpage on or before December 19th (http://www.ucrcommission.com/system-conservation-pilot-program-for-2023/).

Through the SCPP, municipal, industrial, and agricultural water users in the Upper Basin can submit a proposal and, if selected, will be monetarily compensated for voluntary actions that temporarily reduce the consumptive use of Colorado River System water in the Upper Basin. Proposals must include reductions in consumptive use. Depending on your state's laws, possible projects could include but are not limited to temporary fallowing or deficit irrigation of agricultural crops, reuse of industrial water, recycling of municipal supplies, improvement of distribution system efficiency to reduce consumptive use, reductions in municipal landscape irrigation or indoor use, and other methods that would result in additional water conservation for the Colorado River System in 2023.

SCPP participants will be selected consistent with the factors outlined in the "UCRC Facilitation Exhibit for Implementation of a Temporary System Conservation Pilot Program in the Upper Colorado River Basin" attached to the Funding Agreement[4] as well as any additional criteria deemed relevant by the Upper Division States and the UCRC in their review and selection process. A significant consideration for selection in the 2023 program will be the cost of the proposed project in terms of price per acre-foot for conservation reductions. Projects that engage in speculation and profiteering will not be selected. Other factors that will be considered include but are not limited to the following:

- A history of recent consumptive use of Colorado River water by the Project Proponent;

- Adherence of the Proposal to the requirements of the Facilitation Exhibit and the RFP;

[4] The Funding Agreement can be viewed on UCRC's website at http://www.ucrcommission.com/wp-content/uploads/2022/12/SCPP-2023-Funding-Agreement-FINAL.docx.

- Priority will be given to projects that are likely to mitigate impacts of the ongoing drought;

- Diversity of location and type of conservation measures, including consideration of multiple benefits;

- The relative size of the Project in terms of acre-feet of water that may be conserved;

- The comparative ease or difficulty of implementing the Project, including the proposed Verification Plan for the Project;

- The amount of time required for the Project to generate conserved consumptive use;

- Required permitting and approvals, if any; and

- For non-fixed price Proposals, the amount of the proposed price per acre-foot and a justification for the proposed price.

The Upper Division States, through the UCRC, will jointly review and select project proposals. Project Proponents who submit Proposals that are selected will be required to execute a System Conservation Implementation Agreement (SCIA) with the UCRC, which will provide the terms and conditions for the design, implementation, verification, and evaluation of the Pilot Program Project and compensation to the participant (see contract template attached to the Funding Agreement with BOR at http://www.ucrcommission.com/wp-content/uploads/2022/12/2023-SCPP-Faciliation-Exhibit-FINAL.docx).

To be considered for funding under this RFP, proposals should be received by the UCRC by February 1, 2022. If you/your organization are interested in participating in the Program, please e-mail your proposal to the UCRC at scpp@ucrcommission.com. Please also copy the representative of the state in which the project is located at the e-mail addresses listed below.

For Colorado:	Amy Ostdiek, amy.ostdiek@state.co.us
For New Mexico:	Ali Effati, ali.effati@ose.nm.gov
For Utah:	Lily Bosworth, lbosworth@utah.gov
For Wyoming:	Jeff Cowley, jeff.cowley@wyo.gov

Responses to the RFP must be submitted electronically in accordance with the instructions above. Faxed or mailed flash drives or hard copies will not be accepted.

The issuance of this RFP does not imply that the UCRC is bound to select a Proposal. The UCRC reserves the right to reject all or any of the Proposals for any or no reason.

This RFP is not an agreement or an offer. The purpose of this RFP is to provide interested parties with information that may be useful to them in the formulation of their Proposals pursuant to this RFP. The UCRC accepts no liability of any nature, whether resulting from negligence or otherwise, however caused and arising from reliance of any prospective Project Proponent or any other person upon the statements contained in this RFP.

The Project Proponent shall bear all their costs associated with or relating to the preparation and submission of their Proposal, including but not limited to preparation, expenses associated with any presentations which may be required by the UCRC, or any other costs incurred in connection with or relating to the Proposal. All such costs and expenses will remain with the Project Proponent, and the UCRC shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Project Proponent or any other person in preparation or submission of the Proposal, regardless of the conduct or outcome of the selection process.

If you have any questions, please contact the UCRC or your state's representative, as listed above.

Agricultural Conservation

AGRICULTURAL WATER CONSERVATION

WATER CONSERVATION & DROUGHT MITIGATION ON PRIVATE WORKING LANDS IN THE WEST
POLICY OPPORTUNITIES IN THE FARM BILL AND BEYOND

Editors' Note: In October, the Western Landowners Alliance released a report: "Western Water Conservation and Drought Mitigation on Private Lands: Policy Opportunities in the Farm Bill and Beyond" — Authors: Zach Bodhane and Ward Scott. What follows is an abridged version of that report, which has been edited and condensed to better match our format. The full report is available from the Western Landowners Alliance website https://westernlandowners.org/publications/

Introduction

Drought Resilience

The western United States continues to face extended and increasingly severe drought conditions that threaten municipal and agricultural water supplies, energy production, wildlife and aquatic habitat, recreational opportunities, and overall water and environmental quality. In response to continuously diminishing water supplies in Lake Powell and Lake Mead on the Colorado River, the federal government has begun taking measures to curtail water delivery to western states. Congress has recognized that current drought conditions pose a critical threat to western water supplies and has taken several recent actions to address drought resilience and promote water conservation in federal water management operations, as well as on private farmlands, ranches and forests.

Federal and Private Lands

Although western water is largely managed under state laws, the federal government and private landowners play a critical role in large-scale efforts to conserve limited water resources through the implementation of conservation practices. Federal agencies, such as the US Bureau of Reclamation (Reclamation), have authority over the management of major federal storage projects, including Lake Powell and Lake Mead. Additionally, several programs — largely authorized under the federal farm bill Conservation Title and administered by the US Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) — provide technical and financial assistance to private landowners to plan and implement water conservation practices on their lands. Congress has recognized that drought has become the single largest cause of US farm production losses, and has directed "the development of creative solutions to conserve water while maintaining productive use of farmland."

Conservation Title Programs

Through the Agriculture Improvement Act of 2018 (2018 Farm Bill), Congress prioritized water conservation and drought mitigation as areas of focus to be addressed through reauthorized Conservation Title programs, including: the Environmental Quality Incentives Program (EQIP) and its subprograms; the Conservation Stewardship Program (CSP); the Conservation Reserve Program (CRP) and its subprograms; the Regional Conservation Partnership Program (RCPP); and the Watershed and Flood Prevention Operations (WFPO) program. Additionally, the Inflation Reduction Act of 2022 (IRA) extends authorization and funding of several farm bill conservation programs and provides funding for additional western drought measures.

In this report, the Western Landowners Alliance (WLA) examines amendments to farm bill conservation programs under the 2018 Farm Bill along with other relevant federal programs that may be used to address western water challenges, with the goal of preventing the need for further federal restrictions on water allocations within the Colorado River Basin and other western watersheds. Based on these findings, WLA also provides recommendations for amendments to the next farm bill and other state and federal policies to:

Recommendations

- Expand farm bill conservation programs' focus on water conservation and western drought mitigation
- Empower community-based leaders to play a larger role in addressing water shortages and innovating in agricultural water conservation
- Improve coordination among state and federal agencies to leverage collective capacity and resources
- Address challenges to farm bill program delivery to improve landowners access to programs that support land and water stewardship

Colorado River Drought Contingency Plans

Colorado River Compact

The Colorado River is critical to the southwestern US and to the national economy, providing water to over 40 million people and to almost 5 million acres of farmland. Over-appropriation of the river and reduced water supplies within the system have resulted in critical conditions and the urgent need for large-scale, coordinated actions, to promote conservation among the millions of water users within the Colorado River Basin. Allocation of water within the Colorado River Basin is primarily governed by the Colorado River Compact of 1922 (Compact), a Congressionally-approved agreement among the

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seven Basin states which established the Upper Basin (Colorado, New Mexico, Utah and Wyoming) and the Lower Basin (Arizona, California and Nevada). The Compact provided that each Basin was to be allocated 7.5 million acre-feet of water annually. A 1944 treaty obligated an annual delivery of an additional 1.5 million acre-feet to Mexico from the system. In 1922, the parties to the Compact incorrectly assumed that water supplies in the Colorado River would average 16.4 million acre-feet per year. From 1906 to 2020, actual annual flows in the Colorado River averaged 13.9 million acre-feet per year. Since 2000, long-term drought conditions have reduced flows to an average of just 12.5 million acre-feet per year.

DCP's

Facing mandatory Reclamation water delivery cuts from Lake Powell and Lake Mead, the seven Colorado River Basin states finalized drought contingency plans (DCPs) in March 2019 for the Upper and Lower Basins. The DCPs, which outline coordinated strategies among the states for Colorado River reservoir operations during drought and water supply shortages, were subsequently approved by Congress in April 2019.

The Upper Basin DCP focuses on the volume and management of Lake Powell to ensure that its surface maintains a minimum elevation of 3,525 feet (the minimum level required for hydropower generation) and calls for the establishment of an Upper Basin DCP Demand Management Program, which would pay private water rights holders for temporary reductions in water use. Despite Upper Basin DCP efforts, in 2022 Lake Powell fell to its lowest level in over 50 years. In May 2022, Reclamation invoked emergency authority to protect hydropower generation at Lake Powell by diverting approximately 500,000 acre-feet from the Flaming Gorge Reservoir to Lake Powell, and by retaining 480,000 acre-feet in Powell that would have otherwise been released into the Lower Basin.

Water Restrictions

The Lower Basin DCP requires curtailed water deliveries to Lower Basin states when the surface of Lake Mead lowers to predetermined "trigger" levels. Despite efforts through the Lower Basin DCP, water supplies at Lake Mead continue to diminish. Recent Reclamation studies indicate that the surface of Lake Mead will likely continue to lower significantly. On August 16, 2021, Reclamation announced that total Colorado River system storage had depleted to 40% capacity and implemented Tier 1 delivery curtailments in the Lower Basin. On August 16, 2022, Reclamation announced that surface levels of Lake Mead require additional Tier 2 water restrictions, which will take effect in January 2023. Under the terms of the Lower Basin DCP, Tier 1 and 2 restrictions represent a curtailment of 21% for Arizona, 8% for Nevada and 7% for Mexico. As of September 6, 2022, the US Drought Monitor reported that Lake Mead and Lake Powell are 28% full and 24% full, respectively.

Federal Farm Bill

The federal farm bill, typically reauthorized every five years, is an omnibus law that addresses nationwide issues surrounding food, nutrition, agricultural policies, forestry, and natural resource conservation. The most recent farm bill, the 2018 Farm Bill, is comprised of 12 separate titles.

Voluntary Programs

The Conservation Title (Title II) was first added to the farm bill as part of the Food Security Act of 1985 and encourages environmental stewardship on private working lands. Title II programs provide technical and financial assistance to landowners for: the implementation of conservation practices; development of innovative conservation and technologies; and for the retirement of environmentally sensitive lands from production. Participation in all farm bill conservation programs is voluntary. These programs are administered by the USDA, primarily through NRCS, as well as through the USDA's Farm Service Agency. Although eligibility for participation in most conservation programs is broad, many programs require a competitive selection process for acceptance.

Source Water

The 2018 Farm Bill amended several farm bill conservation programs by adding language expressly intended to promote: water conservation; efficient water management practices; and drought mitigation in the western US — particularly within the Colorado River Basin. The Bill also requires that 10% of mandatory conservation program funding be dedicated to source water protection. The USDA is directed to "encourage practices that relate to water quality and water quantity that protect source water for drinking water (including protecting against public health threats) while also benefiting agricultural producers." NRCS is authorized to offer producers increased incentives and higher payment rates (up to 90% cost-share) for the implementation of such practices through farm bill conservation programs.

Inflation Reduction Act of 2022

Inflation Reduction Act of 2022 (IRA) was enacted in August 2022. Among the IRA's primary goals is to address climate change, with a specific focus on reducing greenhouse gas emissions and addressing the ongoing drought in western states. The IRA provides billions of dollars in new funding for farm bill conservation programs, specifically EQIP ($8.45 billion), CSP ($3.35 billion), ACEP ($1.4 billion), and

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Drought Funding

RCPP ($4.95 billion), through 2026. The IRA also extends authorization for the four programs (as well as for CRP) until 2031.

Additionally, the IRA includes $4 billion in funding for drought relief and mitigation in the 17 Reclamation states, with priority given to Colorado River Basin activities. The $4 billion in funding for drought relief is set aside for grants, contracts, or financial assistance agreements.

IRA Drought Relief Funding supports:

- Compensation for Voluntary Reduction (temporary or multi-year) in diversion of water or consumptive water use
- Voluntary System Conservation Projects that achieve verifiable reductions in use of or demand for water supplies or that provide environmental benefits in the Lower Basin or Upper Basin of the Colorado River
- Ecosystem & Habitat Restoration Projects to address issues directly caused by drought in a river basin or inland water body

Federal Farm Bill Programs Addressing Water Conservation

Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program (EQIP) provides "flexible technical and financial assistance" to private landowners and agricultural producers to address targeted environmental and natural resource issues (including water conservation) while keeping their lands in production. EQIP assistance is available to agricultural producers and owners of non-industrial private forestland, as well as tribal governments. Eligible lands under EQIP include: cropland; rangeland; pastureland; non-industrial private forestland; and other farm or ranch lands. EQIP funding is available nationwide. In FY2021, the EQIP program provided $1.26 billion in funds through 34,054 contracts, covering 11.6 million acres.

Conservation Plans

EQIP participants work directly with NRCS to develop conservation plans and implement various conservation practices in their operations. Landowners are eligible for reimbursement from USDA through a contracted cost-share agreement, which typically covers up to 75% of costs associated with planning, implementation, management, and maintenance of approved practices.

EQIP is a competitive program. Eligible landowners may submit applications for EQIP funding which are then ranked by NRCS state offices based on designated criteria specific to each state. General criteria that NRCS evaluates in the EQIP project selection process include: (i) cost-effectiveness of proposed conservation practices; (ii) magnitude of expected conservation benefits; (iii) effectiveness of the project addressing designated resource concerns; (iv) use of conservation practices that provide long-term conservation enhancements; and (v) compliance with federal, state, tribal, and local laws and regulations.

Use Reduction

USDA EQIP regulations express that NRCS may give priority to EQIP project applications that include water conservation or irrigation-related practices that: (i) result in a reduction of water use in the agricultural operation; or (ii) include an agreement by the applicant not to use any associated water savings to bring new land under irrigation production unless the producer is participating in a watershed-wide project that will effectively conserve water.

The 2018 Farm Bill reauthorized EQIP through FY2023 and funded the program at the following levels: $1.75 billion for FY2019; $1.75 billion for FY2020; $1.8 billion for FY2021; $1.85 billion for FY2022; and $2.025 for FY2023. The IRA reauthorized EQIP through 2031 and provided $8.45 billion in additional funding for the program at the following levels: $250 million for FY2023; $1.75 billion for FY2024; $3 billion for FY2025; and $3.45 billion for FY2026.

Streamlining Programs

The 2018 Farm Bill also amended EQIP to address water conservation issues and expanded EQIP eligibility to water management entities (WMEs) that service private agricultural producers. Under Section 2304(e), USDA may enter into a EQIP contract for water conservation or irrigation efficiency practices with "a State, irrigation district, groundwater management district, acequia, land-grant mercedes, or similar entity under a streamlined contracting process to implement water conservation or irrigation practices under a watershed-wide project that will effectively conserve water, provide fish and wildlife habitat, or provide for drought-related environmental mitigation, as determined by the Secretary." This provision was intended to address a widely held concern among private landowners, particularly in the West, that participation in EQIP had been overly cumbersome (financially, technically, and otherwise) for many individual landowners and that water conservation measures can be more effectively implemented at the watershed level.

Eligible water conservation practices expressly listed under the new EQIP provisions for WMEs include: water conservation scheduling; water distribution efficiency; soil moisture monitoring; irrigation-related structural or other measures that conserve surface water or groundwater, including managed aquifer recovery practices; a transition to water-conserving crops; water-conserving crop rotations; or

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deficit irrigation. The 2018 EQIP amendments also expand eligible lands for WME contracts to include not only the producer's land, but also land that is adjacent to the producer's land, as well as land that is under the control of the WME.

Cost-Share

The 2018 Farm Bill also introduced language to EQIP that increases cost-share payments to eligible landowners (up to 90% reimbursement) for costs associated with "high-priority" conservation practices focusing on water quality and/or water quantity. Each state may designate up to 10 high-priority practices to be eligible for increased payments. Designated practices must: (i) address specific causes of impairment relating to excessive nutrients in groundwater or surface water; (ii) address the conservation of water to advance drought mitigation; (iii) meet other environmental priority and other priority resource concerns identified in habitat or other area restoration plans; or (iv) be geographically targeted to address a natural resource concern in a specific watershed.

WaterSMART Coordination

EQIP-WaterSMART INITIATIVE

NRCS and Reclamation have established the EQIP WaterSMART Initiative (EQIP-WSI), wherein the agencies work to ensure that activities using EQIP funds to address water and drought issues are coordinated with Reclamation investments made through the WaterSMART program. WaterSMART supports state, local, and tribal water managers with the planning and financial assistance for implementation of projects to increase water supply, such as modernization of existing water storage and delivery infrastructure and other drought resilience measures.

NRCS and Reclamation investments are coordinated toward priority areas proposed by NRCS State Conservationists. Projects are selected by NRCS through a competitive process. Common activities funded through EQIP-WSI include: irrigation water management, irrigation water conveyance, structures for water control, cover crops, and sprinkler irrigation systems. Assistance under EQIP-WSI in FY2021 totaled 159 contracts in western states, covering over 23,374 acres of working lands, and providing over $11.6 million in assistance to landowners.

Technology Trials

EQIP CONSERVATION INNOVATION GRANTS (CIG)

The Conservation Innovation Grant (CIG) program, first authorized in 2002, is a subprogram under EQIP that awards grants for the development and implementation of new tools and technologies to address natural resource conservation on private agricultural lands. CIG funding opportunities are announced each year and grants are awarded through a nationwide competitive grants process. CIG projects must involve EQIP-eligible lands and landowners, but eligibility for CIG grants extends to individuals, as well as non-governmental organizations and state, local and tribal governments. CIG grantees match federal investments on a one-to-one basis.

The 2018 Farm Bill directs USDA to use $25 million of EQIP funding annually (increased to $50 million under the IRA) to conduct on-farm conservation innovation trials on private lands to test "new or innovative conservation approaches" including: precision agriculture technologies; enhanced nutrient management plans, nutrient recovery systems, and fertilization systems; soil health management systems; water management systems; resource conserving crop rotations; cover crops; and irrigation systems.

Funding for trials is directed to program partners, who then provide payments and technical assistance to producers to offset risks of adopting new conservation practices. The 2018 Farm Bill authorizes the USDA to enter into agreements to provide payments (including compensation for foregone income) to producers completing conservation innovation trials on their land.

Priority Watersheds

EQIP CONSERVATION INCENTIVE CONTRACT (CIC) PROGRAM

The 2018 Farm Bill established a new Conservation Incentive Contract (CIC) program under EQIP, which focuses on the implementation of conservation practices to address specific priority resource concerns within designated watersheds. The CIC program is open to agricultural producers, subsistence landowners, non-industrial private forest landowners, and tribes. Eligible lands under CIC include: cropland; rangeland; pastureland; non-industrial private forestland; and other farm or ranch lands. CIC contracts last from five to 10 years

Conservation Stewardship Program (CSP)

The Conservation Stewardship Program (CSP), established in 2008, provides financial and technical assistance to eligible landowners for the implementation of approved conservation activities on their lands. Like EQIP, CSP is a competitive program in which participants are selected by NRCS under designated criteria. CSP differs from EQIP in that CSP focuses on conservation across the entire operation of the subject land, and provides participants with annual payments for meeting the stewardship

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Sensitive Lands

CRP

USDA Priorities

Water Quality

thresholds that address specific priority natural resource concerns. In 2021, CSP provided over $513.6 million in financial assistance to new participants, covering over 9.8 million acres.

The 2018 Farm Bill changed CSP from an acreage-based program (previously limited to 10 million acres, annually) to a dollar-based program with annual funding of $700 million in FY2019, increasing to $1 billion in FY2023. The IRA extended CSP authorization through 2031 and provided an additional $3.25 billion in CSP funding through FY2023. Notably, the 2018 Farm Bill also extended eligibility to include public lands associated with an operation. This provision is critical to western producers where operations frequently include both private land and allotment on public lands.

Conservation Reserve Program (CRP)

The Conservation Reserve Program (CRP), originally authorized in 1985, provides private landowners with annual rental payments for voluntarily removing environmentally sensitive lands from production for a specified period. CRP is administered by the Farm Service Agency (FSA); NRCS oversees CRP land eligibility determinations, conservation planning, and implementations on the ground. Through CRP, participating landowners receive annual rental payments, typically over a 10-15 year period, to replace crops with resource conserving flora on highly erodible and environmentally sensitive lands. Rental rates are based on the productivity of soils within each county and the average dryland cash rent.

CRP enrollment is divided into two categories: 1) General CRP and 2) Continuous CRP. General CRP contracts are awarded on a competitive basis, using an Environmental Benefits Index (EBI); proposed applications with the highest score are accepted to participate in the program. General CRP applications are limited to annual enrollment periods. Time periods to apply for general CRP enrollment are limited. Continuous CRP contracts are utilized for special CRP subprograms and initiatives and allow for the continuous enrollment of environmentally sensitive lands devoted to specific designated conservation practices. Continuous CRP enrollment is not subject to a competitive selection process.

CRP is an acreage-based program. The 2018 Farm Bill capped CRP enrollment at the following levels: 24.5 million acres in FY2020; 25 million acres in FY2021; 25.5 million acres in FY2022; and 27 million acres in FY2023. Increases in acreage enrollment are partially offset by reduced rental rates. As of May 2022, there were 22.1 million acres enrolled in CRP, with an estimated $2 billion dedicated to 2022 CRP funding.

CRP CONSERVATION RESERVE ENHANCEMENT PROGRAM (CREP)

The Conservation Reserve Enhancement Program (CREP) is a continuous CRP program that was first established in 1997 but codified in the 2018 Farm Bill. CREP authorizes USDA to enter into agreements with states and NGOs to target designated project areas with continuous CRP enrollment contracts. Farmers and ranchers are paid an annual rental rate, along with other federal and non-federal incentives, as specified in the CREP agreement. CREP agreements are limited to specific geographic regions and to lands where specific conservation practices can address high priority natural resource issues. Annual rental payments for CREP contracts are typically higher than those for general CRP contracts. Lands can only be enrolled in CREP if the state or eligible NGO has a CREP agreement with USDA.

The 2018 Farm Bill expressly addresses drought and water conservation agreements under CREP by authorizing USDA to: (i) enroll other agricultural land on which identified resource concerns can be addressed if enrollment of such land is critical to accomplishing the purposes of the agreement; (ii) permit dryland agricultural uses with the adoption of best management practices on the land if the agreement involves the significant long-term reduction of consumptive water use, and if dryland production is compatible with the agreement; and (iii) calculate annual rental payments consistent with existing administrative practice for similar drought and water agreements to ensure regional consistency in those rates.

CRP CLEAN LAKES, ESTUARIES, AND RIVERS (CLEAR30) INITIATIVE

The 2018 Farm Bill established the Clean Lakes, Estuaries, and Rivers (CLEAR30) Initiative as a continuous CRP. CLEAR30 is intended to address water quality issues — specifically the reduction of nutrient and sediment loading and harmful algal blooms — by enrolling lands into 30-year contracts. Participants receive annual payments for maintaining their land in accordance with an approved conservation plan. The initiative, which was initially limited to the Chesapeake Bay region, was expanded nationwide in April 2022. As of May 2022, the CLEAR30 initiative had enrolled 23,212 acres.

GRASSLAND CRP (GCRP)

The Grassland CRP (GCRP) is a CRP subprogram supporting grazing operations and grasslands. GCRP is functionally similar to general and continuous CRP in that producers enter into long-term

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contracts (10 or 15 years) and receive annual per-acre rental payments in exchange for maintaining enrolled land according to an approved conservation plan and prohibiting land from conversion or development. GCRP differs from general and continuous CRP in that producers may keep land in agricultural production (e.g., haying and/or grazing) while following an approved conservation plan.

Ecological Significance

Along with reauthorization to include a floor of two million acres enrolled nationwide, the 2018 Farm Bill included several changes to the program which improved its utility in western grasslands. USDA was authorized to prioritize enrolling lands of "ecological significance" including land that may contribute to the conservation and recovery of at-risk, threatened or endangered species under the Endangered Species Act, and land that supports wildlife migration and habitat connectivity. In GCRP signup 203 (2021), the USDA made use of these provisions by establishing two National Grassland Priority Zones in the "Greater Yellowstone Wildlife Corridor Priority Zone" and the "Dust Bowl Priority Zone." Landowners enrolling in these zones received additional offer ranking points and increased per acre rental rates. These priority zones were subsequently expanded in GCRP signup 204 (2022).

Long-Term Contracts

While there were no explicit water conservation provisions tied to GCRP in the 2018 Farm Bill, the program's focus on promoting grassland ecosystem health and resilience through long-term contracts with producers makes it a potential vehicle for expanded investments in drought resilience in the West.

Regional Conservation Partnership Program (RCPP)

Non-Federal Partners

The Regional Conservation Partnership Program (RCPP), established in 2014, addresses on-farm, watershed, and regional natural resources concerns through coordination between NRCS and non-federal partners. RCPP provides funding and technical assistance for projects that address priority natural resource issues within a region or in one of eight designated critical conservation areas (CCAs). RCPP projects are proposed by a lead project partner, who works with private landowners within the approved RCPP area. Eligible lead partners under RCPP include: agricultural or silvicultural producer associations; farmer cooperatives or other groups of producers; state or local governments; tribal governments; municipal water treatment entities; water and irrigation districts; conservation-driven NGOs; and institutions of higher learning.

If a proposed RCPP project is approved by NRCS, farmers and ranchers are then allowed to apply to NRCS for participation in the project. Program funds may be used by lead partners to provide direct assistance to producers to implement conservation practices on their farms. RCPP funds may also be used by lead partners for technical assistance, including: resource assessment; conservation practice survey and design; conservation planning; and resource monitoring.

The 2018 Farm Bill amended RCPP to be a stand-alone program and RCPP funding was increased to $300 million annually for FY2019 through FY2023 — a $200 million increase from previous levels. Amendments to RCPP under the 2018 Farm Bill also reallocated funding under the program — 50% of RCPP funding is now designated to state and multi-state projects, while the other 50% is designated to projects in CCAs.

Watershed Protection and Flood Prevention Act: Watershed and Flood Operations (WFPO)

Watershed Plans

The Watershed Protection and Flood Prevention Act (Watershed Act), first authorized in 1954, focuses on providing technical and financial assistance to public entities for planning and implementing authorized projects. Project sponsors utilize the Watershed and Flood Prevention Operations (WFPO) section of the program. Project sponsors work with NRCS to develop a watershed plan. Once a watershed plan has been approved, project sponsors work with landowners to install conservation measures and outline areas in which conservation goals may be achieved.

Project Purposes

WFPO projects are intended to be developed only "when land or water resource issues in a watershed cannot be adequately addressed by individuals or groups making use of other USDA conservation programs. Projects should not be developed for the purpose of providing higher cost-sharing rates than those available through other USDA conservation programs." Authorized project purposes under WFPO include: flood prevention and flood damage reduction; watershed protection, including land treatment practices installed to conserve and develop water quality and quantity; public recreation, including any practice that creates or improves a water resource or surrounding area; fish and wildlife habitat management and improvements; agricultural water management, including groundwater recharge measures and projects to improve irrigation efficiency; agricultural water supply measures; and water conservation and quality improvements.

The 2018 Farm Bill establishes permanent funding for WFPO in the amount of $50 million annually, in addition to funds already designated by Congress; the program had historically received discretionary funding through the annual appropriations process. Additionally, the 2018 Farm Bill allows NRCS to

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waive WFPO's watershed planning requirements where "unnecessary or duplicative," including where environmental or cultural resource compliance activities have been completed by another agency.

Farm Bill Program Implementation Issues

Despite the myriad of provisions, programs and initiatives included in the 2018 Farm Bill intended to promote water conservation and drought mitigation, western water supplies continue to suffer. Western states face the prospect of additional cuts to Colorado River conveyances under terms of the Colorado River DCPs. A number of water conservation provisions included in the 2018 Farm Bill are in need of further development, clarification and input from relevant stakeholders.

Program Flexibility

On August 1, 2019, a bipartisan group of 11 western US Senators sent a letter to Secretary of Agriculture Sonny Perdue (Senators' Letter), requesting that USDA immediately implement western drought provisions that were included in the 2018 Farm Bill "and use them in a coordinated and flexible manner to establish a western drought initiative to address the water supply challenges in the West and sustain our agricultural economy." The Senators' Letter emphasizes the need for immediate and effective implementation of various new water conservation authorities under the 2018 Farm Bill.

Participation & Approval

USDA reports demonstrated issues with the competitive application processes for EQIP and CSP contracts. Between 2010 and 2020, just 31% of eligible landowners that applied for EQIP and only 42% of landowners that applied for CSP were awarded contracts. In 2010, USDA awarded EQIP contracts to 36,499 of 98,030 applicants (37%). In 2020, the number of EQIP applicants increased to 125,341, while only 33,701 (27%) were awarded contracts under the program. In 2021, USDA received 113,893 applications for EQIP contracts and funded 34,054 (30%). Notably, 21,116 applications were determined to be valid but did not receive EQIP funding. In 2010, USDA awarded CSP contracts to 20,567 of 38,501 applicants (53%). In 2020, 12,142 of 34,572 (35%) applications for CSP funding were approved for funding. 6,682 of 27,110 applications for CSP contracts (25%) were approved. Despite lower participation and approval rates, overall acreage enrolled in CSP has generally increased throughout the West.

Funding & Awareness

Other reports indicate that USDA program implementation suffers generally from: funding and staffing shortages; lack of consistent national guidance to inform decisions at the NRCS State Conservationist level; lack of agency expertise with various state water law issues; and general lack of awareness and understanding among eligible landowners of the opportunities available to them under farm bill conservation programs. Insufficient coordination among USDA agencies and across departments further limits the success of program delivery. This is particularly true where responsibilities for conservation planning and/or technical assistance and program enrollment and delivery are split between different agencies.

Adequate Funding

Community-Based Organizations (CBOs), such as place-based groups or producer-led groups hold significant promise in helping to deliver durable, voluntary and collaborative solutions to western communities struggling with drought. These groups could also improve conservation program delivery by providing producers with a trusted single point of entry into the process. However, these groups often struggle to secure predictable and adequate funding. They are often functionally unable to utilize farm bill conservation programs and other federal funds due to prohibitive non-federal match requirements, and the complexity of program enrollment and implementation. RCPP is cited as an especially cumbersome program for these organizations to use. For example, numerous CBOs reported passing on potentially successful landscape-scale RCPP projects as they would come at too great of a financial loss to the organization.

State Water Laws

Another potentially significant impediment to implementation of water conservation measures as part of federal programs is state water law. States have largely retained their primary authority over the management and allocation of water resources. State water laws vary, but western state water laws are largely based on the legal doctrine of "prior appropriation" — which ensures that limited water supplies are delivered to the user who was the first to establish their right. Under the doctrine, water rights holders must put their allocation of water to a "beneficial use." Failure to put water to a beneficial use for a certain amount of time (prescribed by state law) will result in a water rights holder losing the unused portion of their right under the doctrine of abandonment or through state forfeiture laws. This rule of "use it or lose it" poses a significant risk to water rights holders, as many states do not recognize water conservation (i.e., non-use of the water) as a valid "beneficial use." Some western states have passed legislation to expressly recognize water conservation measures as beneficial uses, to be quantified as part of a user's larger water right. Other states have expressly exempted water conservation measures from abandonment and/or forfeiture under state law. The complexity of western state water law and the inherent risks to water rights holders of losing a portion of their rights to forfeiture and/or abandonment

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under state laws presents a significant issue that must be addressed for federal water conservation measures to work on watershed and regional scales.

Analysis & Recommendations

In recognition of the importance of federal measures to incentivize water conservation on private working lands, Congress amended several conservation programs in the 2018 Farm Bill to broaden and strengthen water conservation and drought mitigation provisions. Implementation of these provisions has not yet been fully effective, but the upcoming farm bill cycle (presumably in 2023) presents opportunities to refine and improve farm bill programs, to address worsening drought conditions throughout the West, and to avoid further federal intervention in interstate water allocation. Water conservation and drought mitigation under farm bill conservation programs could be improved through additional legislation, regulations, policies, and/or guidance documents that:

Opportunities

- Encourage and facilitate effective coordination and collaboration between federal Departments (e.g., USDA and DOI) and agencies (e.g., NRCS, FSA, and Reclamation), as well as with state and tribal authorities, in the implementation of water conservation efforts. The EQIP-WSI Initiative may provide a model for how agencies within DOI and USDA can work together with private landowners to ensure that conservation efforts are coordinated and working in concert to ensure the greatest water conservation results at a watershed scale.

National Standards

- Direct USDA/NRCS to develop rules, regulations and/or agency guidance outlining nationwide standards for new water conservation provisions in farm bill programs, including for new EQIP provisions providing eligibility (and streamlined application processes) to WMEs and definitions of watershed-scale projects.
- Direct USDA/NRCS to develop rules, regulations and/or agency guidance to give the highest priority to conservation practices that address western water conservation and drought mitigation, and that result in actual and quantifiable savings of system water and identify best practices and innovative water conservation technologies for utilization in conservation program projects.
- Continue to expand farm bill conservation programs' focus on water conservation and western drought mitigation, including establishing new CRP continuous programs, CIG grants, CIC contracts, and other initiatives, and pilot programs.
- Develop a CRP sub-program focused on water conservation similar to GCRP to pay producers annually to reduce water consumption through a range of practices or improvements (e.g., switching to less water intensive crops, implementing partial fallowing). This program would compensate producers for lost income opportunity as a result of implementing water conservation measures and would allow continued agricultural production in line with an approved management plan.

Underserved

- Empower CBOs and other locally-led conservation organizations to lead in local and regional water conservation efforts and address funding barriers posed by non-federal match requirements and program complexity. One avenue to accomplish this would be to reserve a portion of RCPP funds allocated to projects in critical conservation areas for the purpose of ensuring participation of CBOs and entities working with historically underserved farmers and ranchers.
- In coordination with state water planning efforts, explore opportunities to support the establishment of community-developed water plans and water sharing agreements through RCPP and Reclamation WaterSMART grants.

Leveraging Funds

- Ensure that USDA/NRCS receive adequate funds for program implementation (including necessary staffing and technical assistance capacity) from dedicated sources and determine how new funds for western drought provided in the IRA and other recent federal legislation can be most effectively utilized to complement water conservation efforts through farm bill programs.
- Codify opportunities to leverage USDA, state, and other federal conservation programs against one another while avoiding clear situations of "double-dipping". For example, landowners receiving baseline payments for long-term conservation efforts through CRP contracts could then also utilize EQIP, Reclamation and/or state funds for cost-share and technical assistance on water infrastructure improvements or watershed health projects.

Coordinator

- Empower community leaders to match opportunity with need. Explore how to fund and support jointly-funded resource coordinator positions housed in CBOs to conduct outreach and work with interested landowners to identify state and federal funding opportunities across agencies and departments.
- Incentivize landowners to apply for, and participate in, farm bill programs through adequate financial and technical assistance, practical and streamlined application and planning processes, and effective legal protections of real property and water rights.
- Direct USDA/NRCS to consult with state water authorities and CBOs to identify opportunities to

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develop state legislation that would protect private water rights from potential abandonment and/or forfeiture due to conservation measures. Explore how to qualify enrollment in a qualified state or federal soil and water conservation program as a "beneficial use" under state law. State agricultural property tax laws and regulations include similar provisions allowing for participation in qualified conservation program (e.g., CRP) to qualify under an agricultural tax assessment.

- Ensure that landowners are informed of and educated on conservation assistance opportunities available through farm bill conservation programs through NRCS, as well as through CBOs.
- Direct USDA/NRCS to consult with private landowners and CBOs to better understand impediments to landowner participation in conservation programs, as well as to identify farm bill conservation programs that are underutilized and/or underfunded. For example, NRCS currently participates in annual meetings with land trust partners to discuss implementation of the Agricultural Conservation Easement Program. This cooperative approach to improving program delivery should be expanded to cover implementation of water conservation programs with WMEs, states, CBOs, producers and relevant federal agency staff.

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Zach Bodhane directs government relations and policy advocacy work for the Western Landowners Alliance. Prior to joining WLA, he worked as a Policy Advisor for the Western Governors' Association for six years. His work at WGA included leading the Western Governors Species Conservation and Endangered Species Act Initiative and facilitating WGA's Working Lands Roundtable. Central to both of these initiatives was a focus on building bipartisan coalitions to advance collaborative species conservation recommendations. He holds a B.S. in Natural Resources Management from Colorado State University, specializing in Watershed Science and Fishery Biology. Zach lives in Washington DC with his partner Lauren and their dog, Phoebe.

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Southwestern Water Conservation District
Attn: Steve Wolff, Beth Van Vurst, Board of Directors
841 E. Second Ave.
Durango, CO 81301

Subject: Opposition to removal of Division 7 Exemption in Colorado "Use it or Lose it Statute" and restart of the System Conservation Pilot Program this year

I am a property and water rights owner in SW Colorado. I write to oppose removal of the Division 7 exemption in CRS § 37-92-305, Colorado's "Use It or Lose It" statute this year. This exemption is apparently being removed to fully enable Demand Management(DM) and related conservation programs, like the restart of the System Conservation Pilot Program(SCPP), in SW Colorado. I speak only for myself here, I am not a lawyer but have been researching Colorado River issues since October, 2018. I maintain one of the more extensive online document archives on the Law of the River at:

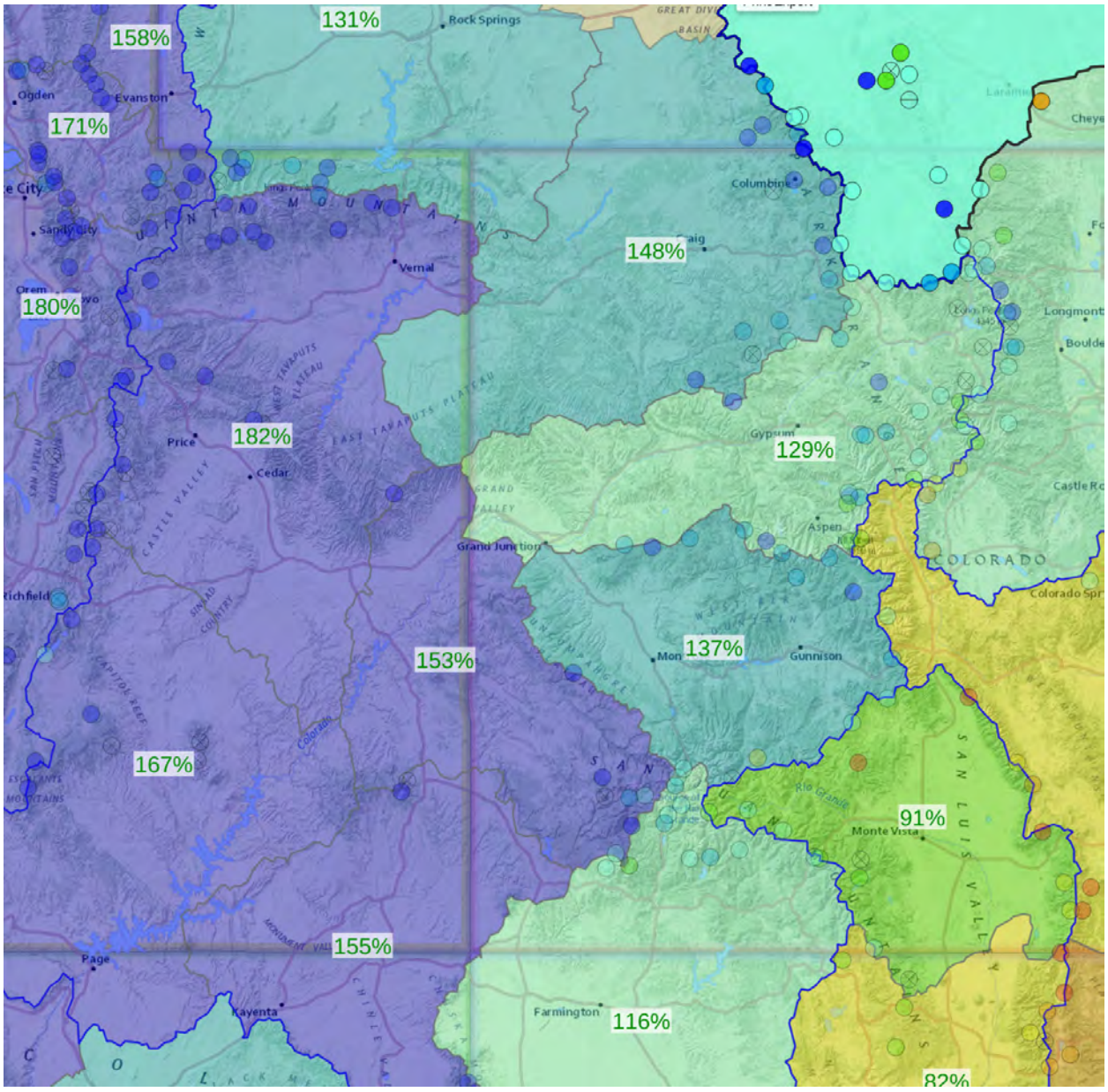
https://www.varuna.io/LOTR/chron.html

The relevant statute, CRS § 37-92-305:

> *In determining the amount of historical consumptive use for a water right in* ***division 1, 2, 3, 4, 5, or 6,*** *the water judge shall not consider any decrease in use resulting from the following:*
> …
> II. The nonuse or decrease in use of the water from the water right by its owner for a maximum of five years in any consecutive ten-year period as a result of participation in:
>
> **A. A water conservation program, including a pilot program, approved in advance by a water conservation district, water district, water authority, or water conservancy district for lands that are within the entity's jurisdictional boundaries or by a state agency with explicit statutory jurisdiction over water conservation or water rights;**
>
> B. A water conservation program, including a pilot program, established through formal written action or ordinance by a water district, water authority, or municipality or its municipal water supplier for lands that are within the entity's jurisdictional boundaries;
>
> **C. An approved land fallowing program as provided by law in order to conserve water or to provide water for compact compliance; or**
>
> **D. A water banking program as provided by law.**

I also have serious concerns about the rushed restart of the System Conservation Pilot Program and ask you to discourage participation by SW Colorado water rights holders in that program at least for this year, especially until the concerns below are properly addressed. The UCRC and CWCB have had 4 years and spent millions of dollars to deal with these problems, they didn't and are instead hastily restarting a deeply flawed program from 2015-2018. In light of the dramatically improved snowpack on the West Slope as of today, restarting this flawed program seems to be exploiting a fading crisis and should be delayed until next year.

NRCS Snow Water Equivalent percent of median end of day Jan 2



Some of my concerns:

- **Velocity** - The SCPP program restart was unveiled at CRWUA December 14, they immediately issued RFP's and will select participants March 1st. The velocity of this program seems designed to prevent discussion, scrutiny or stakeholder feedback on this complex, politically charged, program. It looks like crisis exploitation to stand up a conservation program this complicated, this quickly, which certain entities want but many don't.
  The Southwestern WCD announcement of the intent to remove the Division 7 exemption was in early December and may be voted on this month, with intervening holidays, not enough time for essential consultations, much less a thorough and proper discussion of the complex issues in play here. This same rush was attempted by proponents of this change in 2020 to suppress opposition and debate. That started an entirely unnecessary conflict that grievously damaged SW in general, and me in particular. Southwestern WCD should be informing all stakeholders of major changes like this, bring it to SWBRT and foster spirited but civilized debate to reach the best consensus and policy possible instead of suppressing these vital democratic mechanisms.
- **Consultation** - There are indications NGO's were involved in the creation of this program while there doesn't appear to have been any consultations by the UCRC and CWCB with Southwestern WCD, the Colorado River District or major stakeholders on how this program will work in practice. Your district has a statutory mandate to be involved in programs like this, and involve your stakeholders, from conception. This program appears to be ripe for inequity and abuse in how much money is awarded and water taken, from where. This same epic failure occurred in 2018 with the Drought Contingency plan, now it has become a pattern of abuse by the UCRC and CWCB.
- **NEPA -** Why is a program with potentially large environmental impacts being undertaken with no NEPA process? Probably because NGO's want it, and not to obstruct it.
- **Instream Flow Program Not Lake Powell Crisis Mitigation** - This seems to be more of an Instream Flow augmentation program for environmental benefits and to satisfy NGO's than a program to address the current crisis in Lake Powell. If the crisis in Lake Powell is being exploited to stand up a program primarily for its environmental benefits that is inappropriate. I am most definitely opposed to spending money to dry up fields in my community to send our water rights out of our service area for that purpose.
- **Irrigation Company bylaws** - My irrigation company has a clause in their bylaws that precludes selling water out of our service area except under tight constraints specifically because of past pressures to participate in Instream Flow Loan Programs.
- **Shepherding** - There seems to be no plan to shepherd the conserved water to Lake Powell. Without one, no one will know how much water, if any, makes it to Lake Powell to mitigate the crisis there. Other water users may divert some or all of the water. Colorado's State Engineer currently has no authority to shepherd water past other headgates though that may change soon. If and when there is shepherding it is easier near the stateline than from headwaters which disproportionately targets water rights holders like me..

- **Storage Pool** - If the Demand Management storage pool in Lake Powell is not authorized or enabled, at least not at this time, any water that reaches Lake Powell will be released to Lower Basin entities like Central Arizona Project and Southern Nevada Water Authority(SNWA) to reduce their looming shortages, I think this is contrary to the Compact. I ask you to ask the UCRC why exactly this pool is not enabled (i.e. is one or more states opposing it, and if so which ones).
- **The Southern Nevada Water Authority(SNWA) plan** being used as the basis of current negotiations is apparently demanding 1,000,000 af from the Upper Basin THIS YEAR, maybe 500,000 af under DROA from CRSP reservoirs and 500,000 af under SCPP and other programs(i.e. tribal). They are apparently demanding an enormous amount of water to negotiate down to just the huge amount of water they really want and make the huge amount of water seem OK to the UCRC. It is not. They should get what they are entitled to under DROA and no more.
- The **Lower Basin has been overusing their compact entitlement** since the Central Arizona Project(CAP) came on line. By contrast the Upper Basin is foregoing around 3,000,000 million af of our entitlement to the benefit of the Lower Basin, SNWA and CAP and to cover reservoir losses to deliver water to them. **Yet they demand even more.** The refusal by Colorado's Assistant AG to discuss the Upper Basin's unused entitlement at a roundtable meeting in October 2018 is one reason I embarked on this 4 year research and education campaign.
- **Proportionality** - The CWCB Policy on Demand Management(below) requires proportional contributions from the West Slope and Front Range. That requirement seems to have been discarded. This policy and these sideboards seem to have been abandoned because adhering to them is hard, so the UCRC is calling this a pilot program and not a Demand Management program. With $125 million for up to 700,000 af of water this is a Demand Management program, not a pilot.
- **Article III(a) and VIII Concerns** - I have serious concerns this program doesn't comply with Colorado River Compact Article III(a) and Article VIII which seem to require "**exclusive beneficial consumptive use**" of water from Upper Basin water rights in the Upper Basin. This is especially true if there is no DM Storage Pool so the water will just be released to the Lower Basin. In this 2018 YouTube SNWA's John Entsminger mocks the UCRC and James Eklund for begging the Lower Basin to allow the Upper Basin to Demand Manage ourselves and send our water to the Lower Basin, SNWA specifically:

  Gravity Works
  https://www.youtube.com/watch?v=rC16W3DT0Y4&list=PL8q1QDrFH67WLAJ7pUZlzDeewYZssidPd&index=4&t=2631s

I think he is referring to the fact the UCRC is ignoring III(a). I ask that a thorough, proper and impartial legal review be conducted of this issue to explain and verify how it's suddenly OK to ignore these articles which are the heart, soul and whole purpose of the Compact, to **keep the Lower Basin from buying or taking Upper Basin water**. How is it suddenly OK for the Department of Interior, water master for the Lower Basin. to buy

water from Upper Basin water rights for the benefit of CAP and SNWA, junior users in the Lower Basin who are facing painful shortages?

ARTICLE III

(a) There is hereby apportioned from the Colorado River System in perpetuity to the Upper Basin and to the Lower Basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist.

ARTICLE VIII

Present perfected rights to the beneficial use of waters of the Colorado River System are unimpaired by this compact. Whenever storage capacity of 5,000,000 acre-feet shall have been provided on the main Colorado River within or for the benefit of the Lower Basin, then claims of such rights, if any, by appropriators or users of water in the Lower Basin against appropriators or users of water in the Upper Basin shall attach to and be satisfied from water that may be stored not in conflict with Article III.

All other rights to beneficial use of waters of the Colorado River System shall be satisfied solely from the water apportioned to that Basin in which they are situate.

- **Article IV(b) Concerns** - Article IV(b) establishes Ag and Domestic use as the dominant and priority uses for Compact water. This program appears to be embarking on a path to invert these priorities and make Ag subservient to hydropower to preserve Lake Mead and Lake Powell. Yes, it is desirable to defend these reservoirs but you can't take water from Ag water rights, under pressure, to do it:

ARTICLE IV

(a) Inasmuch as the Colorado River has ceased to be navigable for commerce and the reservation of its waters for navigation would seriously limit the development of its Basin, the use of its waters for purposes of navigation shall be subservient to the uses of such waters for domestic, agricultural, and power purposes. If the Congress shall not consent to this paragraph, the other provisions of this compact shall nevertheless remain binding.

(b) Subject to the provisions of this compact, water of the Colorado River System may be impounded and used for the generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such water for agricultural and domestic purposes and shall not interfere with or prevent use for such dominant purposes.

(c) The provisions of this article shall not apply to or interfere with the regulation and control by any State within its boundaries of the appropriation, use, and distribution of water.

- **UCRC Canceled SCPP -** The UCRC canceled the original SCPP program in 2018 due to serious and legitimate concerns most of which have not been addressed 4 years later. There is still no storage pool in Powell, there is still no shepherding, there are still unresolved legal issues. The relevant part of that 2018 motion is below.
- **Antispeculation** - When I oppose removing the Division 7 exemption, many reply it's not that big a deal to most water users to have some injury to their rights. Most don't go to water court with change cases. My response is The Division 7 exemption is the one statutory obstacle we have on the books to prevent hedge funds like Water Asset Management, represented by former UCRC commissioner James Eklund, from buying family owned farms in our service area with the intent of selling it to these conservation programs, for profit. The state of Colorado seems to suspect them of speculation and profiteering with these activities and water rights, I'm not qualified to say. WAM's water rights are the "asset" they are managing. They don't want that "asset" damaged by participation in these programs with the Division 7 exemption in place in SW. Participation in these programs is their primary goal at least in the short term.

This is a YouTube video from November where Eklund talks at length about the importance of this “Use it or Lose it’ statute to them and that their water rights not be damaged by DM participation:

https://www.youtube.com/watch?v=_8z9P-bFHPY&t=3400s

In a 1996 The Atlantic interview with WAM’s CEO Disque Deane told this story:

> *“Deane told me he’d abandoned an effort to buy a distressed New Mexico property in 2014 after hearing about a local gas-station attendant who—opposed to the idea of investors buying up water—refused to fill the cars of workers who were drilling wells on the property.”*

I’ve been playing the role of this gas-station attendant by signaling Eklund, WAM and others like them that they aren’t welcome here. One tool I’ve been using is the Division 7 exemption. I knew of WAM’s activities in Grand Valley in February 2020 when this change was first attempted but couldn’t raise it as a concern since it wasn’t public then and I didn’t want to be accused of “conspiracy theories”.

I ask you to pick up the gauntlet I’ve dropped, be that gas-station attendant, and discourage WAM from moving into my community and SW as a whole, instead of welcoming it.

Other parts of Colorado, the Colorado River District and Grand Valley Water Users Association in particular, have encouraged and cheered on these conservation programs, In doing so they seem to have invited WAM to buy large swaths of their land and water, wiping out family owned farms, to their regret.

Keeping the Division 7 exemption is essential to make James Eklund, Water Asset Management and their ilk feel unwelcome here. As everyone says it doesn’t actually prevent temporary participation by ordinary water users in a DM program. A question can be raised as to why the abandonment statute was amended in 2020 to allow permanent DM participation. That implies DM proponents are considering permanent fallowing of some farms and ranches contrary to CWCB’s “temporary” policy.

- **Section 603** - In 1968 Wayne Aspinall placed Section 603 in the Colorado Basin Project Act(CRBPA) to protect the Upper Basin and Colorado water rights from over allocation and overuse of the Colorado River in the Lower Basin caused by:
    - removal of the Gila and tributaries from the Compact
    - the 1945 Mexico Treaty
    - construction of the Central Arizona Project.

  In 2005 SNWA and Arizona used litigation threats against USBR and the Upper Basin states to demand releases from Lake Powell be increased to 9 maf to delay shortages they are required to take under the 1968 CRBPA. The UCRC probably should've

invoked 603 in response then but didn't, they didn't want to litigate. As a result, Arizona got exactly what they demanded. This is described in detail in this Law Review paper where Arizona's negotiators bragged about the strategy they used against Reclamation and the Upper Colorado River Commission(UCRC):

> **From a Colorado River Compact Challenge to the Next Era of Cooperation Among Seven Basin States (2007)**
> https://arizonalawreview.org/schiffer-guenther/

The reservoirs have now been drained, just as Arizona demanded, we are in an inevitable crisis as a result, SNWA and CAP shortages were mostly delayed until 2022 as they demanded, their shortages now are too little, too late. In my opinion one origin of this crisis was the failure by the UCRC to invoke Section 603 in 2005. Section 603 probably needs to be invoked now before SNWA and CAP take even more Upper Basin water to slake their unquenchable thirst.

Colorado River Basin Project Act(1968)
https://www.varuna.io/LOTR/1968/crbproj.pdf

82 Stat. 901

Pub. Law 90-537 - 16 - September 30, 1968

SEC. 603. (a) Rights of the upper basin to the consumptive use of water available to that basin from the Colorado Rive system under the Colorado River Compact shall not be reduced or prejudiced by any use of such water in the lower basin.

(b) Nothing in this Act shall be construed so as to impair, conflict with, or otherwise change the duties and powers of the Upper Colorado River Commission.

D. Edward Millard

1/3/2023

The Galloway Proposal and Colorado Water Law: The Limits of the Doctrine of Prior Appropriation the Doctrine of Prior Appropriation, Landry (1985)
https://www.varuna.io/LOTR/1985/Galloway_1985.pdf
The Galloway Project and the Colorado River Compacts: Will the Compacts Bar Transbasin Water Diversions, Gross (1985)
https://www.varuna.io/LOTR/1985/Galloway_1985.pdf

The Compact language suggested territorial use limitations. When Arts. III(a) and II(f)(g) are read together, the "exclusive consumptive use" allowed each Basin in the Compact is limited to the physical territory of the particular basin. Art. III(a) apportioned to each basin the "exclusive beneficial consumptive use" of 7.5 m.a.f./year. Art. II(f)(g) defined the Upper Basin as those named states "within which and from which waters naturally drain into the Colorado River System" above Lee Ferry, and the Lower Basin as those named states below Lee Ferry. Art. VIII further specified territorial use limitations, affirming that "[a]ll rights to beneficial use of waters of the Colorado River System shall be satisfied solely from the water apportioned to that Basin in which they are situate." The drafters added this language to the article which dealt with water storage to meet the Lee Ferry delivery obligation, in order to affirm that water stored in the Upper Basin for the benefit of the Lower Basin would be part of the Lower Basin's apportionment.[41]

The Colorado River Compact appears to forbid the Galloway Project. Essentially, the Compact apportions exclusive use of a quantity of water to the Lower and Upper Basins. Galloway envisions using water apportioned to one Basin in the other. Art. VIII of the Compact expressly precludes Galloway's arrangement. This Article requires that all rights to beneficial use under the Compact "be satisfied *solely* from the water apportioned to that Basin in which they are situate."[63] As will be discussed in the remaining sections of this paper, Articles II, III, and IV also preclude Galloway's arrangement because they limit the use of the water to the territory of the Basin to which the water was apportioned.

2018 UCRC Motion Ending First System Conservation Pilot Program
http://www.ucrcommission.com/RepDoc/SCPPDocuments/DemandMgmtResolution062018.pdf

WHEREAS, although the Pilot has helped explore the feasibility of some aspects of demand management programs, it does not provide a means for the Upper Division States to account, store and release conserved water in a way which will help assure full compliance with the Colorado River Compact in times of drought;

WHEREAS, the Commission recognizes that no demand management program is likely to conserve enough water in any single year to sufficiently address the risk of Lake Powell dropping below critical elevations, or help assure full compliance with the Colorado River Compact;

WHEREAS, the Commission believes that any viable demand management program requires the ability to accumulate and store conserved water over multiple years. However, no means for accounting, measuring, conveying or storing water have currently been established. As such, any water that is currently conserved is subject to use by downstream water users or release from existing system storage prior to being needed in response to emergency drought conditions, thereby defeating the intended purposes of any demand management;

WHEREAS, the Commission recognizes that additional administrative, technical, operational, economic and legal considerations must also be investigated to fully inform the feasibility and usefulness of developing a demand management program in the Upper Basin;

WHEREAS, the Commission finds that the Pilot does not allow the Upper Division States to sufficiently investigate storage or the additional administrative, technical, operational, economic and legal considerations necessary to explore the feasibility of demand management as part of its ongoing emergency drought contingency planning efforts; and

WHEREAS, the Commission believes that the Upper Division States, acting through the Commission, must be active participants in the development and implementation of any demand management program in the Upper Basin, and desires to evaluate the lessons learned and build upon the interest gained during the Pilot to inform its continuing investigation of ways to achieve the purposes of demand management.

NOW, THEREFORE, BE IT RESOLVED that the Commission commits to continue to explore the feasibility of developing demand management program(s) within the Upper Basin to protect Lake Powell from reaching critical elevations to help assure full compliance with the Colorado River Compact;

BE IT FURTHER RESOLVED that the Commission will temporarily cease to act as the contracting entity for the Pilot in the Upper Basin after fulfilling its commitments for 2018 in favor of focusing its efforts on investigating outstanding considerations related to demand management;

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

1313 Sherman Street
Denver, CO 80203

P (303) 866-3441
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John Hickenlooper, Governor

Bob Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

November 15, 2018

SUPPORT AND POLICY STATEMENTS

REGARDING COLORADO RIVER DROUGHT CONTINGENCY PLANS, DEMAND MANAGEMENT AND COMPACT ADMINISTRATION

(5) Investigate voluntary, temporary, and compensated reductions in consumptive use of waters that otherwise would deplete the flow of the Upper Colorado River System for the specific purpose of helping assure compact compliance. Consistent with the Upper Basin Demand Management Storage agreement, the Board may also join the UCRC and other Upper Basin States in any evaluation of importing of waters from outside the natural Colorado River watershed to augment the Upper Colorado River System for compact compliance purposes.

(6) Prioritize avoidance of disproportionate negative economic or environmental impacts to any single subbasin or region within Colorado while protecting the legal rights of water rights holders. The Board will work with water rights holders and stakeholders to assess the feasibility of and promote mechanisms for obtaining roughly proportionate contributions of water consumptively used from the Colorado River System to a Demand Management program over a given timeframe from participants on each side of the Continental Divide.

(7) Comply with applicable state law, including, but not limited to, the requirement that no action related to demand management cause material injury to other water rights holders.

(8) Consider and be fully informed by the input and considerations of water rights holders and stakeholders potentially impacted by application of demand management strategies within Colorado, and institute a public review process for any such proposed demand management program.

(9) Work with Colorado's Commissioner to the Upper Colorado River Commission to cooperate with the other Upper Division States of Wyoming, Utah, and New Mexico, as well as the Department of the Interior, to investigate and potentially develop a regional demand management program that considers and incorporates Colorado's demand management approach, and to ensure that water conserved within Colorado under any demand management program is not diverted and consumptively used by any other state.

This is **Memo 13** from CWCB staff for the September 2018 CWCB meeting where the Demand Management policy (aka DM sideboards) were demanded by Colorado River District(Andy Mueller) and Southwestern WCD(Bruce Whitehead). Contrary to claims made at the Feb 2020 SWCD board meeting, the Division 7 change to the "Use it or Lose it" change case and abandonment statutes then was to insure no injury due to DM program participation. The abandonment statute was amended in 2020.
https://www.varuna.io/LOTR/2018/CWCB_DCP_Memo_13_2018.pdf

and suggestions regarding demand management as the program continues to be explored throughout the Upper Basin and within Colorado.

Sustainability of the Colorado River system is in the interest of the entire state. If a demand management program is determined to be feasible, the parameters for its operation must be set forth in a cooperative process that allows for stakeholder input, while recognizing the interaction between interstate and intrastate efforts.

To date, interest in the DCPs and the concept of a potential demand management program, its limits, operations, application, etc., has been significant. Stakeholders have currently identified a number of potential cautions, considerations and guidelines for the state to consider or adopt before developing and implementing any demand management program in Colorado. The water users have currently considered these and other issues as necessary sideboards to effectively protect and promote the interests of Colorado water users and communities throughout the state. These key issues currently include, but are not limited to:

- Whether the program would be limited to "temporary, voluntary, and compensated" conservation activities or be expanded to include something more;
- Identifying the source of funding for a temporary, voluntary, compensated demand management program;
- Whether the program would be used to help assure continued compliance with the Colorado River Compact or something more;
- How any demand management program would operate to share the benefits and burdens associated, so as to avoid any one sector or geographic area shouldering a disproportionate and negative burden by participating in the program;
- How to avoid water speculation as a result of the program;
- How the program could be operated consistent with Colorado law, including but not limited to: avoiding injury to other water users, shepherding water to designated storage facilities, assuring that participation in the program will not constitute non-use for purposes of change cases or abandonment proceedings, etc.;
- Identifying the roles and authorities regarding the interplay between interstate discussions and negotiations on the Colorado River and the intrastate conversations and considerations of Colorado water users regarding demand management; and
- Understanding the extent to which the state would engage and work in tandem with stakeholders on rules for compact administration before considering a pivot from temporary, voluntary, and compensated demand management to something more akin to mandatory curtailment.

Staff recommendation

Staff recommends that the Board take testimony from the public regarding demand management. Staff recommends the Board consider, in consultation with the State Engineer, adopting a position that sets forth the Board's approach for determining how evaluation, exploration, and development of any demand management program in Colorado will proceed. The intent of this position and direction to staff will be to appropriately capture and address both current and future input regarding demand management as it evolves. Staff will be

January 10, 2023

Board of Directors
Southwestern Water Conservation District
841 E. Second Ave.
Durango, CO 81301
Via email: stevew@swwcd.org

Re: Extension of SB19 Protections to Water Rights Owners in Division 7

Dear Board Members,

On January 17, 2023, the Board will be considering an important question that affects water rights owners located in the portions of the Southwestern Water Conservation District that are subject to Water Division 7 jurisdiction. The question is, will the District support enactment of legislation that extends protections available to the rest of the state to water rights owners within Water Division 7 that wish to conserve water? We are writing to urge the Board to support extending protections.

Background

In Colorado, a water right is limited by the amount of water that can be applied to beneficial use. In the case of an irrigation right, some of the water diverted will be consumed and some will return to the stream system. Consumptive use is that portion of diverted water that is consumed by the crop and does not return to the stream system. The consumptive use of a water right defines the value and amount of that water right should the water right be changed (change of point of diversion, type, or location of use) or sold.

A water right can be determined to be totally or partially abandoned due to non-use for a long period of time (ten years or more) if the non-use is due to an actual intent of the owner of the water right to permanently forego the beneficial use of water. In addition, reduction of consumptive use can result in less water being available to that water right should it be changed or sold.

In the last two decades, Colorado's legislature has come to realize that this "use it or lose it" approach to water rights discourages conservation and has adopted legislation to protect water rights owners from loss of consumptive use or abandonment if they choose to conserve water. Conservation means partial or complete reduction of consumptive use on a temporary basis, such as deficit irrigation, partial, complete, or seasonal fallowing, irrigation of a less consumptive crop, etc.

In 2005, the legislature enacted SB133 which provides that an owner of a water right that participates in an approved water conservation program will not be considered to abandon their unused water right. This protection applies statewide.

In 2013, the legislature enacted SB19, which prohibits consideration of years of reduced consumptive use due to participation in a conservation program in calculating a water right's historic consumptive use. Historic consumptive use is calculated by averaging yearly consumption. By eliminating years when consumptive use was low due participation in a conservation program, the statute prevents reduction of the overall historic consumptive for the water right. This protection was initially available to owners of water rights in water divisions 4, 5 and 6, covering most of western Colorado, and was extended to divisions 1, 2, and 3 in 2017 through HB1233.

HB1233 was originally drafted to apply SB19 protections statewide. However, an eleventh-hour amendment by Senator Crowder on the floor of the state senate excluded Water Division 7 from the statute's protections. It has been reported that Senator Crowder excluded Division 7 after "feedback from a representative from that water division." [1]

Extending Protections to All Southwest Colorado Irrigators

As the law stands today, an irrigator that lives in the portion of the District under Water Division 4 jurisdiction enjoys the protection of SB19. An irrigator that lives in the portion of the District within Water Division 7 does not. There is no logic behind this disparity of treatment among the District's constituency.

The argument has been made that extending SB19 protections to water rights owners within Water Division 7 will encourage speculation. Presumably, speculators are not now buying water rights in Division 7 to sell water to downstream interests because they risk losing consumptive use. This is simply non-sensical. The value of the water rights for such hypothetical speculators would be in the continued existence of the water right without abandonment, not in preventing reduction of consumptive use. Abandonment protection already exists statewide for water rights enrolled in conservation programs. Extension of SB19 protections would not benefit speculators, it would benefit irrigators that chose to conserve water through various legitimate, available programs.

For example, in 2022, a conglomerate of organizations representing agricultural and conservation interests created a grant program designed to make funding available to support design and implementation of drought resilience and innovative water conservation projects with the goal of advancing strategies for irrigated agriculture to adapt to reduced water supplies (see attached flyer). Over 15 projects have been selected for funding, three of them in southwest Colorado. Most of these projects include testing use of alternative forage crop that uses less water. Fallowing of existing crop (pasture) is usually needed as a first step for establishment of the alternative crop. Unless SB19 protection is available, an irrigator that wishes to try alternative forage crops would lose one year or more of consumptive use in the effort.

Finding innovative ways to continue viable agricultural operations using less water inevitably results in using less water and water rights owners should not be punished for their efforts.

[1] "Colorado HB17-1233: Protect Water Historical Consumptive Use Analysis" University of Denver Sturm College of Law, Elaine Nolen (Law Review, June 27, 2018).

Regardless, the most effective way the Southwestern Water Conservation District can ensure that either SB19 or abandonment protections are applied for legitimate conservation purposes and not for speculation, is to have its own conservation program. Through its own conservation program, the District would be able to scrutinize applications and reject those that involve speculation. The Colorado River Water Conservation District has been running such program for several years, with great success.

Conclusion

Exclusion of Water Division 7 from SB19 protections has created an oddity within the District, with some constituents enjoying its protection and some not. Depriving water rights owners of SB19 protections serves no purpose other than telling legitimate owners how to use their water rights.

We strongly encourage the District to support legislation to extend SB19 protections to the District's entire service area and to develop a conservation program capable of ensuring that SB19 and abandonment protections are applied to legitimate conservation.

Sincerely,

Amelia (Mely) Whiting
Trout Unlimited
720-470-4758
mwhiting@tu.org

Cc: Steve Wolff
Beth Van Vurst, Esq.

Dolores Water Conservancy District

60 S. Cactus St. P.O. Box 1150 Cortez, CO 81321
Phone: 970-565-7562 Fax: 970-565-0870
Email: dwcd@frontier.net

January 11, 2023

Southwestern Water Conservation District Directors
Via Steve Wolff, General Manager
841 E. Second Ave.
Durango, CO 81301

Re: Division 7 Exemption, CRS § 37-92-305 Standards with respect to rulings of the referee and decisions of the water judge - definitions.

Dear Southwestern Directors,

Since SWCD is revisiting their support for the removal of the Division 7 exemption, I would like to express DWCD reservations about acting this year. When SWCD was originally approached, the idea was in support of conservation that would assist meeting in stream flows for ecological purposes. There appear to be water rights owner concern about participating in a conservation program given the current exemption. While these environmental needs likely still exist, the unintended consequences of removing the exemption could ripple through the southwestern Colorado agricultural economy and existing social community.

The statute states:

> (II) The nonuse or decrease in use of the water from the water right by its owner for a maximum of five years in any consecutive ten-year period as a result of participation in:
>
> > (A) A water conservation program, including a pilot program, approved in advance by a water conservation district, water district, water authority, or water conservancy district for lands that are within the entity's jurisdictional boundaries or by a state agency with explicit statutory jurisdiction over water conservation or water rights;
> >
> > (B) A water conservation program, including a pilot program, established through formal written action or ordinance by a water district, water authority, or municipality or its municipal water supplier for lands that are within the entity's jurisdictional boundaries;
> >
> > (C) An approved land fallowing program as provided by law in order to conserve water or to provide water for compact compliance; or
> >
> > (D) A water banking program as provided by law.

Sections II C & D clearly acknowledge fallowing programs directed for compact compliance and water banking. Thus, the statute also provides similar protections for participation in both System Conservation Pilot Projects and ultimately Demand Management. The current proposed UCRC SCPP requests proposals by February 1, 2023, only three weeks from now. DWCD thinks the current exemption likewise may limit participation in these programs as was expressed for the environmental needs.

2022 has finally seen the Colorado River storage in Powell & Mead hit levels threatening power pools and dangerously approaching dead pools, first in Powell and subsequently Mead. These conditions have forced Reclamation to demand water use cuts of 2 – 4 MAF and thrown all Basin states into emergency actions to make the required adjustments.

Given the potential disincentive for participation under the exemption, DWCD thinks it prudent to maintain the status quo until more operating decisions are made by Reclamation and the seven states after release of the Supplemental EIS currently in progress.

The reasons that the UCRC passed a resolution ending the SCPP program in 2018 remain, primarily no protection on shepherding the water to Powell nor from release to the LB under the acknowledged insufficient 2007 IG.

Given that the UB is still in compliance with the Colorado Compact and the current rush to take advantage of the crisis at Powell & Mead. DWCD believes the Upper Basin is being pressured to solve a Lower Basin over use problem that has persisted for decades. Therefore, I ask that SWCD wait another year to reconsider whether they should support removal of the Division 7 exemption.

Sincerely,

Kenneth W. Curtis III
DWCD General Manager

GRANTS

HARRIS WATER ENGINEERING, INC.
954 EAST SECOND AVENUE, #202
DURANGO, COLORADO 81301
970-259-5322
carrie@durangowater.com

Memorandum
January 11, 2023

To: SWCD Board of Directors
From: Carrie Padgett
Subject: 2023 SWCD Grant Program Application Review Summary

Introduction

The purpose of this memorandum is to provide a summary of the grant applications received for the 2023 SWCD Grant Program. Carrie Padgett assisted SWCD staff with the review and critique of 11 applications received during the submittal period.

A total of $162,986 was requested in grant applications for activities occurring in 2023. SWCD budgeted $250,000 for 2023 requests. The following memorandum provides a summary of each application, their proposed budget, and recommendations and comments from staff. A summary table is all attached. If you have any questions about the grant review or recommendations, please reach out to Steve Wolff or myself.

It should be noted that I serve as the chair for the San Juan Resource and Conservation Development (SJRCD) council. SJRCD provides fiscal management for several projects, including the Bonita Peak Citizen's Advisory Group. SJRCD charges an administrative fee to manage funds for this project as described in the project's Memorandum of Understanding with SJRCD. I do not receive any monetary compensation for serving as a council member.

2023 Emergency Funding Category

No grant applications were submitted for utilization of this funding category for 2023.

2023 Water Supply/Watershed Restoration Funding Category

The grant funding category for "development or improvement of water supply and watershed restoration or enhancement projects, including related design, engineering and construction" has a total of $125,000 available for allocation in 2023. A maximum grant request per application in this category is $60,000. The maximum amount any applicant can receive in a five-year period is $120,000. Originally, four applicants applied for these funds from this category. Staff recommends another application be moved to this category based on its scope of work.

This brings the total to five applications for this category requesting a total of $116,886.

West Lateral Repair

The Florida Consolidated Ditch Company (FCDC) is requesting funds to repair a failing portion of the West Lateral Ditch owned by the FCDC. The mutual ditch company delivers pre-compact water to 223 shareholders and nearly 1,300 project water users for the Florida Water Conservancy District. FCDC provides 6,200 shares that irrigate between 15,000 to 18,000 acres. Shares are currently assessed at $40.30 while each shareholder provides $70.00 for annual operation and maintenance assessments (annual income $265,470). An assessment increase is awaiting shareholder approval. The West Lateral Ditch serves 30 shareholders with 840 acres. Due to the instability of the ditch bank, the repair involves installing an impervious liner which will be protected with 3 inches of shotcrete for long-term stabilization of the ditch. The project's estimated start date is March 1, 2023, and should be completed within 30 days. Repairs to the ditch will improved overall safety to the surrounding area with an expected water saves of one acre foot per day.

FCDC is estimating the total project cost to be $120,000.

- FCDC is requesting $45,000 (37.5% of the total project cost) from SWCD
- FCDC is providing a cash match of $30,000 (25% of the total project cost)
- FCDC received a grant for $45,000 (37.5% of the total project cost) from the Southwest Basins Roundtable Water Supply Reserve Fund

RECOMMENDATION AND COMMENTS:

This project meets multiple priorities in SWCD's strategic plan. This project protects existing pre-compact water rights (Priority 2 – Goal 1). This project improves aging infrastructure while leveraging state dollars (Priority 4 – Goal 1).

FCDC received grants in the past for rehabilitation of the Florida Canal diversion structure. These grants were for a total of $80,000 (2018 and 2020). The five-year limit is $120,000. Based on this limit, FCDC request cannot exceed $40,000. Staff recommends the board discuss enforcing this limit and adjusting the awarded amount. The summary tables already show this adjusted amount.

I also have concerns about the construction costs of this project. The project's budget was based

on bid estimates from local contractors this past fall. I am curious if the applicant was able to secure these estimates or if the project's budget may increase due to inflation.

Turkey Creek Ditch Rehabilitation

The Summit Reservoir and Irrigation Company (SRIC) is requesting funds to repair a failing segment of the Turkey Creek Ditch. This ditch is one source of pre-compact water for Joe Moore and Summit reservoirs. The mutual ditch company delivers water to 146 shareholders who provide annually in assessments $114,690. Significant leaks were identified in the upper reach of the ditch, approximately 5 miles downstream of the headgate, along with a reduced carry capacity due to deferred maintenance. SRIC proposes to imbed Bentonite into 100 yards along the ditch segment with significant leaks. SRIC will also clear and clean the ditch from its diversion point to its intersection with Lost Canyon Road (FS Rd 560). The anticipated start date would be July and work would commence for six weeks.

SRIC is estimating the total project cost to be $31,000.

- SRIC is requesting $15,500 (50% of the total project cost) from SWCD
- SRIC is providing a cash match of $7,500 (24% of the total project cost)
- SRIC is providing an in-kind match of $8,000 (26% of the total project cost)

RECOMMENDATION AND COMMENTS:

This project meets multiple priorities in SWCD's strategic plan. This project protects existing pre-compact water rights (Priority 2 – Goal 1). This project improves aging infrastructure while leveraging state dollars (Priority 4 – Goal 1).

I would like to note that Steve Harris prepared the 2020 feasibility study referenced in the application. I did not participate in that project, nor do I work with SRIC. HWE is not working on this rehabilitation project, but Steve and Dave Henry are working with SRIC on other projects.

Staff recommends this application be awarded in full.

Dolores River Restoration

RiversEdge West (REW) is a regional non-profit organization dedicated to the restoration of riparian lands in the West. REW is applying on behalf of the Dolores River Restoration Partnership (DRRP); REW has participated in DRRP since 2009. The proposed project is located along the Dolores River corridor. Goals of the project include improving habitat for terrestrial and aquatic wildlife, conducting public outreach and stewardship and overall watershed restoration. The first task will be a volunteer stewardship project aimed at bringing together volunteers and DRRP partners to planting events along the San Miguel River just upstream of the Dolores River confluence. This task will occur in April of 2023 with follow up site visits to ensure best possible survival rates. The second task is to partner with the Southwest Conservation Corps (SCC) saw crews focused on tamarisk removal along the Dolores River between Bedrock and Mesa Creek. This task will take place for three weeks in either September or October of 2023.

REW is estimating the total project cost to be $39,062.

- REW is requesting $19,386 (50% of the total project cost) from SWCD
- REW is providing a cash match of $14,728 (38% of the total project cost)
- REW is providing an in-kind match of $4,948 (12% of the total project cost)
    - Matching funds from SCC and BLM are on behalf of the DRRP to achieve a match of 50% to the overall budget and 25% coming from the applying organization.

RECOMMENDATION AND COMMENTS:
This project meets multiple priorities in SWCD's strategic plan. This project will bring together diverse stakeholders to address water needs in the Dolores River (Priority 3 – Goal 1). This project improves watershed health while leveraging federal dollars (Priority 4 – Goal 1). This project has targeted outreach efforts (Priority 6).

I verified the application was in good standing with the state of Colorado. I did not see this document attached to the application.

My question for the applicant is regarding the proposed restoration areas. The map did not provide enough detail for me to confirm of all the proposed restoration would occur within SWCD's boundaries.

If all work is occurring within SWCD boundaries, staff recommends this application be awarded in full. Otherwise amount awarded should be proportional to areas served within SWCD boundaries.

Pagosa Gateway Project

Trout Unlimited (TU) is a non-profit organization with a mission to bring together diverse interests to care for and recover rivers and streams so our children can experience the joy of wild and native trout and salmon. TU is applying on behalf of and as the fiscal agent for the Upper San Juan Watershed Enhance Partnership's (WEP) Pagosa Gateway Project. The project's proposal is to improve 2.1 miles of San Juan River immediately upstream of the Town of Pagosa Springs to preserve aquatic habitat and recreation in the face of declining flows and warming temperatures. The project consists of the construction of a series of measures or "interventions" designed to address the negative impacts of decreasing stream flows on aquatic habitat and to improve the river's resilience in the face of climate change. Types of interaction proposed include low flow channel shaping, grade control structures, riparian plantings, placement of habitat structures, and stream bank work. A conceptual level design for the project has been completed. A USACE 404 permit is required to conduct this work. Once all funding sources are secure, an RFP will be published in May of 2023 with final design and engineering to be completed by the end of 2023. Construction would commence in 2024.

The WEP is estimating the total project cost to be $220,000 for design, engineering, and permitting of the project.

- WEP is requesting $17,000 (8% of the total project cost) from SWCD
- WEP stakeholders and supporters are providing a cash match of $68,800 (31% of the total project cost)

- WEP received a grant for $134,200 (61% of the total project cost) from the Southwest Basins Roundtable Water Supply Reserve Fund
    - The WEP has secured over $1,150,000 in funding for the construction of this project from Bureau of Reclamation, Southwest Basin Roundtable, and the Colorado Water Conservation Board.

RECOMMENDATION AND COMMENTS:

This project meets multiple priorities in SWCD's strategic plan. This project will bring together diverse stakeholders to address water needs in the San Juan River (Priority 3 – Goal 1). This project improves watershed health while leveraging state and federal dollars (Priority 4 – Goal 1).

SWCD provided a letter of support in April of 2022 to Colorado Water Conservation Board for support of WEP's activities, including this project.

Staff has some concerns about this project's timeline and how it relates to the previously funded project (i.e. the work proposed downstream of the Town of Pagosa that was awarded a grant in 2022). I'd like to ask the applicant for further information on the project management of these two projects. Also, the application noted the applicant match total to be $68,800. I was unable to verify this amount based on the attachments included in the application. A detailed budget of the cash match would be helpful. Lastly, the cost estimates table for the entire project includes a 20% consistency under the design, permitting and engineering section. I am curious about the funding source for this 20%.

The staff recommends this application be awarded in full once further details are provided regarding the project timeline and budget.

San Juan Mountain Snowtography Study

Mountain Studies Institute (MSI) is a non-profit organization that utilizes science people can use to empower mountain communities through research, monitoring, and education. MSI is applying on behalf of and as the fiscal agent for a snowtography partnership. This partnership was formed between MSI, United States Department of Agriculture, The Nature Conservancy, Dolores Watershed Resilient Forest Collaborative, Dolores Water Conservancy District, Fort Lewis College, and Center for Snow and Avalanche Studies (CSAS). The partnership is proposing to install two snowtography sites. The first site would be in the Pagosa Springs area and will target a burned mixed-conifer forest, a disturbance and forest type underrepresented in the current SNOTEL network. The second site would be close to Red Mountain Pass at CSAS's long term research site, Swamp Angel. Data collected from these sites could help water managers in the San Juan and Animas watersheds. Existing USFS permits will be amended to allow for this work to occur. In late summer of 2023, MSI and CSAS will install the infrastructure and equipment at each site. The funding request from SWCD will support the cost to fully purchase the equipment needed for the Pagosa Springs site and partially cover the Red Mountain Pass site. Once installed, the site will be visited bimonthly to record snow water equivalent, download instrumentation, and maintain station equipment as necessary.

MSI is estimating the total project cost to be $181,510.

- MSI is requesting $20,000 (11% of the total project cost) from SWCD
- Members of the partnership are providing a match of $48,800 (27% of the total project cost)
    - Cash match is equal to $33,800 (18.6% of the total project cost)
    - In-kind match is equal to $15,000 (8.4% of the total project cost)

RECOMMENDATION AND COMMENTS:
This project meets multiple priorities in SWCD's strategic plan. This project is focused on data collection (Priority 1 – Goal 1). This project improves water supply planning while leveraging federal dollars (Priority 4 – Goal 1).

The applicant assumed USDA funding for a National Needs Graduate Fellowship could be applied as applicant match. Based on the grant guidelines, I do not believe this to be correct. In my summary, I adjusted the applicant's match total to only reflect contributions from project partners. Even with this adjustment, the applicant still satisfies the grant requirements.

Based on the scope of work, I recommend this grant application be moved from the public forums and studies grant category to the water supply/watershed restoration category.

Staff recommends this grant be awarded in full.

2023 Public Forums/Studies Funding Category

The grant funding category for "studies and facilitating stakeholder involvement on water-related matters, including water quality" has a total of $50,000 available for allocation in 2023. A maximum grant request per application in this category is $20,000. The maximum amount any applicant can receive in a five-year period is $40,000. Three applicants applied for these funds for a total of $38,100.

Integrated Modeling

The San Miguel Watershed Coalition (SMWC) is a non-profit watershed group that works to maintain and improve the ecological health of all 80 miles of the San Miguel River and its tributaries. SMWC engages stakeholders across the entire watershed to participate in collaborative efforts that promote the river's health and economic vitality of the watershed's communities. To help prioritize conservation management actions, SMWC proposes to develop an integrated hydrologic/hydraulic tool that can be used to quantify changes in water availability under a variety of scenarios (i.e. changing climate, hydrologic responses to wildfires, mitigation, conservation, and management actions). The tool, MIKESHE, will be housed by SMWC with stakeholders having access to evaluate potential solutions to balancing water demands and needs. The proposed project includes tasks focused on tool development, scenario evaluations, and public outreach specific to the utility and uses of the tool. SMWC is requesting funding from SWCD to support implementation of the first task which will occur throughout 2023.

SMWC is estimating the total project cost to be $181,510.

- SMWC is requesting $20,000 (20% of the total project cost) from SWCD

- Stakeholders of SMWC are providing a cash match of $22,000 (22% of the total project cost)
    - SMWC is requesting a waiver for the match requirement to be reduced to 10%. SMWC is a non-profit organization that is primarily funded through grants with only 5% of their budget funded through donations. Last year, SMWC staff provided $14,015 in in-kind services in preparation for this project.
    - Letters of support for the project and for cash match contributions were provided with the grant application.

RECOMMENDATION AND COMMENTS:
This project meets multiple priorities in SWCD's strategic plan. This project is focused on data collection (Priority 1 – Goal 1). This project improves water supply planning while leveraging state dollars (Priorities 2 and 4). This project continues to foster collaboration between diverse stakeholders in the San Miguel basin (Priorities 3 and 6).

SWCD provided a letter of support in April of 2022 to Colorado Water Conservation Board for support of this project.

SWCD provides, annually, $7,000 in funding to the SMWC for water quality sampling and activities.

Staff recommends this grant be awarded in full.

Community Consensus Institute Workshops

The Mancos Conservation District's (MCD) mission is to "promote long-term sustainable use and protection of the Mancos River Watershed. We provide educational, financial, and technical assistance to meet these conservation goals." The MCD has identified a gap in the community's knowledge of how they utilize and interact with the Mancos River and its tributaries. To help lessen this gap, MCD proposed project is a series of workshops in 2023 with the community to understand their relationships with the watershed and its resources. MCD hopes to learn from stakeholder feedback how they can better manage and conserve water resources as needed by the community while respecting water rights holders. MCD is requesting funding from SWCD for meeting materials and supplies, food and beverages for the workshops, and workshop attendee learning manual.

MCD is estimating the total project cost to be $17,000.

- MCD is requesting $8,500 (50% of the total project cost) from SWCD
- MCD is providing a cash match of $4,250 (25% of the total project cost)

RECOMMENDATION AND COMMENTS:
This project meets multiple priorities in SWCD's strategic plan. This project will increase MCD understanding of their stakeholders concerns and help refine water supply planning efforts (Priority 1 – Goal 1). This project continues to foster collaboration between diverse stakeholders in the San Miguel basin (Priorities 3 and 6).

I verified the application was in good standing with the state of Colorado. I did not see this document attached to the application.
Staff recommends this grant be awarded in full.

Animas River Data Collection and Analysis

San Juan Resources Conservation and Development (SJRCD) council was established for the purpose of helping all residents of Southwest Colorado to use, protect and improve natural, cultural, historic, and economic resources. This non-profit organization acts as a fiscal agent for many community organizations and SJRCD is applying on behalf of the Bonita Peak Community Advisory Group (CAG). The CAG serves as a liaison between the community and EPA regarding the Bonita Peak Mining District Superfund site. The proposed project is to conduct a final year (2023) of monthly water sampling at four locations in the Animas River watershed, synthesize existing water quality data to a specific EPA accepted format, and analyze data for goal setting purposes. CAG is requesting funding from SWCD for data formatting and analysis.

CAG is estimating the total project cost to be $34,722.

- CAG is requesting $9,600 (28% of the total project cost) from SWCD
- CAG is providing an in-kind match of $9,000 (26% of the total project cost)
    - Trout Unlimited, a member of the CAG, is providing a cash match of $5,000 (14% of the total project cost)

RECOMMENDATION AND COMMENTS:

This project meets multiple priorities in SWCD's strategic plan. This project is focused on data collection (Priority 1 – Goal 1). This project leverages state dollars (Priority 4).

I verified the application was in good standing with the state of Colorado. I did not see this document attached to the application.

SWCD provides, annually, $5,000 in funding to the CAG for water quality sampling and other activities.

Staff recommends this grant be awarded in full.

2023 Education Funding Category

The grant funding category for "educational purposes, including teaching seminars, workshops and related programs" has a total of $10,000 available for allocation in 2023. A maximum grant request per application in this category is $5,000. Three applicants applied for these funds for a total of $13,000. This total requested amount exceeds the total available for this category. Since the overall budget for the 2023 grant program limit has not been reached the staff supports funding all applications in the category even though the category limit is exceeded.

Tribal Water Media Fellowship

Fort Lewis College (FLC), a public entity, is home to the Ballantine Media Center that engages students in collaborative storytelling through multiple media outlets. FLC along with Rocky Mountain Public Media, and KSUT Public Radio have created the Tribal Water Media Fellowship

(TWMF). TWMF would like to create an annual fellowship for 10-15 students that focuses on local Native communities' issues including water resources. The project includes three phases of development for the 2023 program: (1) Recruitment of student and mentor participants, (2) 10-day intensive workshop with all participants with media training, lectures on water topics, and networking, and (3) public event with lectures and presentations from participants. TWMF is requesting funding from SWCD for workshop related expenses, specifically meeting supplies.

FLC is estimating the total project cost to be $137,160.

- FLC is requesting $5,000 (4% of the total project cost) from SWCD
- Members of the TWMF are providing the application in-kind match of $35,000 (25% of the total project cost)
    - FLC is providing an in-kind match of $16,000 (12% of the total project cost)
    - Rocky Mountain Public Media (RMPBS) is providing an in-kind match of $10,000 (7% of the total project cost)
    - KSUT Public Radio & Tribal Media Center is providing an in-kind match of $9,000 (6% of the total project cost)

RECOMMENDATION AND COMMENTS:
This project meets one priority in SWCD's strategic plan. This project is focused on outreach efforts to a targeted audience (Priority 6).

I would like to point out that FLC is interested in this becoming an annual program. The board may want to discuss if they are interested in providing annual funding. As well as offer their expertise to FLC when developing the program's curriculum.

Staff recommends this grant be awarded in full.

Water in the Ancient World Conference

The San Juan Basin Archeological Society (SJBA) is a non-profit organization established to "advocate for and promote public awareness and preservation of archaeological, cultural and historical resources, primarily of the Four Corners region of the American Southwest." The SJBA is applying for funding to host a 3-day conference in the Fall of 2023 with a working title of "Water in the Ancient World." This conference would explore past cultures, both local and worldwide, relationship with water and learn about their strategies used for water control, addressing drought, and other water use issues. SJBA is requesting funding from SWCD for expenses related to the development and execution of the conference.

SJBA is estimating the total project cost to be $35,500.

- SJBA is requesting $3,000 (8% of the total project cost) from SWCD
- SJBA is providing an in-kind match of $2,500 (7% of the total project cost)
    - SJBA is requesting a waiver for the match requirement to be reduced to 10%.
    - SJBA is a non-profit organization that is primarily funded through donations with many in-kind services provided by members.
    - SJBR plans to charge a conference fee of $50 with an estimated 275 attendees.

RECOMMENDATION AND COMMENTS:
This project meets one priority in SWCD's strategic plan. This project is focused on outreach efforts to a targeted audience (Priority 6).

The applicant match total was noted as $500 on the first page of the application. I had a difficult time determining the total applicant match. While Exhibit 1 – Funding was provided, I was unable to determine what was applicant match versus other funding sources. I'd like the applicant to further explain their funding sources and perhaps provide a more detail budget.

Staff recommends this grant be awarded in full.

Water Education at Fozzie's Farm

Montezuma Land Conservancy (MLC) is a local non-profit organization founded to assist landowners with completing voluntary conservation easements on their private property to project farm and ranch lands, wildlife habitat, and open spaces. MLC has protected 46,000 acres in Dolores, Montezuma, and San Miguel counties as well as operates an 86-acre property in Lewis, Colorado. At the property, MLC hosts numerous events benefiting the farming community. MLC is applying for funding to expand two of their existing education programs that focus on outreach to local youth. The Agricultura Immersion Program offers up to 12 local youth four weeks of exploration into the water resources sector: ranging from site visits to local projects to meeting with experts. The Fozzie's Farm Internship Program is a seasonal internship program for 3 to 5 you each year who actively participate in the irrigation season and work on the farm. MLC is requesting funding from SWCD for meeting materials and contractor wages.

MLC is estimating the total project cost to be $39,800.

- SJBA is requesting $5,000 (13% of the total project cost) from SWCD
- SJBA is providing an in-kind match of $14,700 (37% of the total project cost)

RECOMMENDATION AND COMMENTS:
This project meets multiple priorities in SWCD's strategic plan. This project is focused on outreach efforts to a targeted audience (Priority 6). This project is investing in future water stewards while leveraging state dollars (Priority 4).

I would like to point out that MLC is interested in this becoming annual programs. The board may want to discuss if they are interested in providing annual funding for these programs. As well as offer their expertise to MLC when developing the program's curriculum.

Staff recommends this grant be awarded in full.

2023 Grant Applications Summary

SWCD budgeted $250,000 for 2023 requests, which included $125,000 for water supply/watershed restoration projects,
$50,000 for planning processes and studies, $10,000 for education, and $65,000 for emergency requests.

	Applicant	Project	River Basin	Startegic Plan Priorities	Request	Staff Recommenation
	Water Supply/Watershed Restoration					
1	Florida Consolidated Ditch Co	West Lateral Repair	Florida (Animas)		$45,000	$40,000
2	Summit Reservoir and Irrigation Co	Turkey Creek Ditch Rehabilitaiton	Mancos		$15,500	$15,500
3	RiversEdge West	Dolores River Restoration	Dolores		$19,386	$19,386
4	Trout Unlimited - USJ WEP	Pagosa Gateway Project	San Juan		$17,000	$17,000
5	Mountain Studies Institute	San Juan Mouantins Snowtography Study	San Juan/Animas		$20,000	$20,000
				Total Requested	$116,886	$111,886
				Total Available for Category	$125,000	
	Public Forums, Studies, Planning, Workgroups					
6	San Miguel Watershed Coalition	Integrated Modeling	San Miguel		$20,000	$20,000
7	Mancos Conservation District	Community Consensus Institute Workshop	Mancos		$8,500	$8,500
8	SJRCD - Bonita Peak CAG	Animas River Data Collection & Analysis	Animas		$9,600	$9,600
				Total Requested	$38,100	$38,100
				Total Available for Category	$50,000	
	Educational Semianrs, Workshops, Programming					
9	FLC, RMPBS & KSUT	Tribal Water Media Fellowship			$5,000	$5,000
10	SJ Basin Archaeolgical Society	Water in the Ancient World Conference			$3,000	$3,000
11	Montezuma Land Conservancy	Water Education at Fozzie's Farm			$5,000	$5,000
				Total Requested	$13,000	$13,000
				Total Available for Category	$10,000	
				Grand Total	$167,986	$162,986
				Available	$185,000	
					$22,014	

THE SOUTHWESTERN WATER CONSERVATION DISTRICT

Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
X	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
X	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
NA	I have attached the applicant's financial statements to demonstrate adequate reserves.
X	The financial request to SWCD does not exceed 50% of the total project cost.
X	The applying organization is funding at least 25% of the total project cost.
X	The request is for funds to be used in 2023, for a project to be completed in 2023.
X	I understand that SWCD does not fund payroll, legal, or grant administration costs.
X	I have included a detailed project expense budget.
X	I have included a detailed project funding budget.
X	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
	Feasibility and/or Engineering Studies
X	Maps or Photos
	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal			
Type of Request	Grant X	Loan	Grant/Loan Package
Project Name	Animas River Data Collection, Analysis, and BPMD Goal Setting		
Applicant	San Juan Resource Conservation and Development Council/Bonita Peak CAG		
Project Location (River Basin & County)	Animas River, La Plata and San Juan Counties		
Amount of Request	$9,600		
Total Project Cost	$34,772		
Applicant Match	$9,000		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
X	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding		

received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).

APPLICANT INFORMATION	
Name of Qualified Entity	San Juan Resource Conservation and Development Council
Type of Qualified Entity (See Guidelines)	Nonprofit, 501(c)(3)
Mailing Address	PO Box 1006, Durango, CO, 81302
Federal ID Number	74-2408579
Public Water System ID (if applicable)	
Contact Person	Stephani Burditt
Position/Title	Administrator
Phone Number	970-247-9621
Email	steph@region9edd.org or sjrcd@hotmail.com

APPLICANT DESCRIPTION

Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment.

Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

The San Juan Resource Conservation and Development Council is a Durango based 501(c)(3) that acts as a fiscal agent for many community organizations. The Bonita Peak CAG is a Community Advisory Group (CAG) as described under CERCLA and has been officially recognized by U.S. EPA to serve as a liaison between the local community and EPA regarding the Bonita Peak Mining District (BPMD) Superfund site. The CAG has fifteen members representing a wide variety of interests in both La Plata and San Juan counties. Four of the members were appointed by local governments: La Plata and San Juan Counties, the City of Durango, and the Town of Silverton. The CAG has been meeting monthly with EPA for four years. It has a large email list, a detailed website, and makes presentations to conferences and larger groups outside of monthly meetings. Monthly meetings usually attract 30+ participants including federal, state, and local governments; SUIT; mining companies; environmental groups; and other interested citizens.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measureable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication

dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

Background:

1.) Since the Gold King Mine spill into Cement Creek in August 2015, EPA has spent approximately $110 million related to metal contamination in the Animas River Basin. Most of this funding has been used to treat the Gold King Mine drainage and to characterize other sources of contamination and their potential impacts in support of obtaining settlements from potential responsible parties (PRP's). All major settlement agreements have been finalized during this past year. EPA and the State of Colorado have approximately $95 million in hand to take actions in the coming years for improving water quality and aquatic habitat. These agencies are now actively engaging the CAG and other stakeholders to determine what should be the water quality goals for the BPMD.

2.) In 2022, the CAG submitted a detailed water quality standards proposal to the Colorado Water Quality Control Commission for a segment of Mineral Creek (a major tributary of the Animas River) as part of the goal setting process. The proposal included 34 exhibits and used data collected by the CAG, EPA, and the US Forest Service. While these standards will need some minor adjustments, the adoption by the Commission of the CAG's proposal demonstrated the CAG's technical expertise and capabilities to EPA in terms of goal setting.

3.) Colorado River Watch has been collecting monthly water quality samples at five gages around Silverton, four of which SWCD has been partially funding. They also collect monthly samples at Bakers Bridge and several locations in Durango. Some of this sampling has been going on for thirty years. Yet EPA makes little use of this data because they don't collect it, and it is in a different format than their own data. CAG and River Watch data is acceptable to the Colorado Water Quality Control Commission for their decision-making.

Project:

The project will continue the CAG's monthly sampling at four locations, will put water quality data collected in recent years by the CAG, River Watch, EPA, BLM, FS, and Sunnyside Gold Corp into the same format, and will begin to analyze it collectively for goal setting. Improving and protecting water quality is an important part of ensuring beneficial use of waters of the state.

The CAG has been volunteering to collect monthly water quality samples from the Animas River Canyon in three locations and at one location in Mineral Creek since the fall of 2019. Sample collection in the Canyon requires an eleven-mile roundtrip hike at two locations during most of the year. In winter, sample collection at the upper location requires a thirteen-mile roundtrip ski down the rail tracks from Silverton, and collection for a lower location requires train ride in and out to the Cascade wye. The CAG has been collecting these samples for three years and plans to stop at the end of 2023. Four years of data should provide a good baseline to measure future water quality improvements once EPA takes significant remedial actions to remove metals. EPA rarely collects any samples in the Canyon even though this stretch of river is their top priority for improving water quality.

The CAG intends to put all the surface water quality data into the same format and begin analysis. This will enable the local community to have a fuller picture of water quality related to the Superfund site and to be less reliant on water quality studies produced by EPA's consultants using only EPA data.

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.

Except for samples to be collected in 2023, most of the data to be used in this project will be available by February 2023. EPA and the CAG are sponsoring a workshop for stakeholders to begin detailed discussions of remediation work related to goal setting in February 2023.

Data from different entities should be compiled into a standard format by September 2023. By November 2023, the CAG will have compared that data to water quality standards and calculated metal load reductions that will be needed to meet standards at five gages around Silverton.

ENGINEERING AND LEGAL FEASIBILITY

Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.

No.

Will the Project require state or federal regulatory permits of any type? If yes, please explain.

No.

Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.

The CAG has collected 141 surface water samples, 105 of which are from the Animas Canyon. The data has been put in the format that will be used for the other data gathered by other entities. The CAG data has been compared to water quality standards, and the amounts of metal reductions that would be needed upstream in order to meet water quality standards have been calculated. The spreadsheets have not been attached but can be provided.

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

With the exception of the SWCD request, all other funding has been approved.

CDPHE has been covering lab costs for the samples collected by the CAG for several years and has set aside funding for 2023.

The Durango-Silverton Railroad has provided free tickets to the Cascade wye in the winter for the last three winters and will do so again this year.

Trout Unlimited has committed $5,000 as part of the Bonita Peak CAG's budget. A TU representative is a CAG member. These funds will be used mostly for communication and coordination with various stakeholders through operation and maintenance of the CAG's website, email list, media advertisements, media coordination, travel, and other administrative costs.

CAG In-Kind Contribution:

The CAG will be collecting samples monthly in the Animas Canyon at three locations except during winter and at Burro Bridge in Mineral Creek. Only two Animas Canyon locations are accessible in winter. Collection of samples at Burro Bridge requires a short ski in winter.

Sample collection:
Cascade and Crazy Woman Gulch sites: 12 trips x 2 people x 7 hours x $25/hr. = $4,200
Below Elk Creek: 12 trips x 2 people x 7 hours x $25/hr. = $4,200
Burro Bridge: 12 trips x 1 person x 2 hours x $25/hr. = $600
Total = $9,000

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
Colo. Dept. of Public Health & Environment	$10,500 cash
SWCD	$9,600 cash
Trout Unlimited	$5,000 cash
Durango-Silverton Narrow Gage Railroad	$672 in-kind
Bonita CAG	$9,000 in-kind
Total Applicant Match (At Least 25%)	$9,000
Total Other Funding	$16,172
SWCD Request (Up to 50% of Project Cost)	$9,600
Total Project Cost	$34,772

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
Collect Samples	Bonita Peak CAG	$9,000
Lab Costs for Samples	CDPHE	$10,500
Winter Transportation for Sample Collection	Durango-Silverton RR	$672
Data Formatting and Analysis	SWCD	$9,600
Communication and Coordination	Trout Unlimited	$5,000
Total Project Cost		$34,772
Grant Administration Costs as a Percentage of Total Project Cost		2%

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

2020: $17,158 - Animas River Water Quality Data Update and Analysis
2021: $13,200 – Animas River Data Collection & Standards Proposal Development

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true

to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the *Request for Release of Funds* form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Peter Butler

Signature _____ Date 12/7/2022

Printed Name Peter Butler

As Authorized Representative for Bonita Peak CAG

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application: Laura Spann, 970-247-1302, lauras@swwcd.org.

THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
DW	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
DW	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
DW	I have attached the applicant's financial statements to demonstrate adequate reserves.
DW	The financial request to SWCD does not exceed 50% of the total project cost.
DW	The applying organization is funding at least 25% of the total project cost.
DW	The request is for funds to be used in 2023, for a project to be completed in 2023.
DW	I understand that SWCD does not fund payroll, legal, or grant administration costs.
DW	I have included a detailed project expense budget.
DW	I have included a detailed project funding budget.
DW	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
	Feasibility and/or Engineering Studies
	Maps or Photos
	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal	Educational		
Type of Request	(Grant)	Loan	Grant/Loan Package
Project Name	Tribal Water Media Fellowship		
Applicant	Fort Lewis College, KSUT Public Radio, Rocky Mountain PBS		
Project Location (River Basin & County)	San Juan River Basin, La Plata County		
Amount of Request	$5,000		
Total Project Cost	$137,160		
Applicant Match	$ 35,000		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
X	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).		

APPLICANT INFORMATION	
Name of Qualified Entity	Fort Lewis College
Type of Qualified Entity (See Guidelines)	Public Entity
Mailing Address	1000 Rim Dr, Durango, CO 81301
Federal ID Number	846000556
Public Water System ID (if applicable)	
Contact Person	Damian Walsh
Position/Title	Director, Sponsored Programs, Fort Lewis College
Phone Number	970-247-7695
Email	ospr@fortlewis.edu

APPLICANT DESCRIPTION
Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment. Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.
Fort Lewis College (FLC), KSUT Public Radio, and Rocky Mountain PBS (RMPBS) builds on the existing Ballantine Media Center at FLC that engages students in collaborative storytelling with RMPBS, KSUT, FLC's KDUR public radio station, and via print media with High Country News. - FLC is dedicated to experiential learning for its diverse students and has faculty with water and communication expertise across disciplines who are dedicated to growing environmental and water focused academic and co-curricular programming. Existing FLC programs that will support the fellowship program include Four Corners Water Center, Fort Lewis on the Water (FLOW), Liberal Arts Core in Science Communication, Journalism and Multimedia Studies, and Skywords Visiting Writers Series featuring Indigenous writers ranging from creative writers to journalists. FLC was recently awarded a $110,000 grant from the Walton Family Foundation for this fellowship with the possibility of continued funding if this initial program is impactful. - KSUT, founded in 1976 to serve the Southern Ute Tribe, now includes two broadcast streams: Tribal Radio and Four Corners Public Radio, and serves the broader Four Corners region. KSUT continues to be an innovator and leader in Native broadcasting. KSUT was also instrumental in obtaining a $25,000 grant from the Colorado Plateau Foundation to help in this initial fellowship. - RMPBS is a Colorado statewide leader in public broadcasting with a station in Durango and a presence on FLC's campus. RMPBS' mission includes strengthening the civic fabric of Colorado where everyone feels seen and heard. This fellowship program will leverage the existing collaborative efforts with KSUT and RMPBS that focus on Native and Indigenous stories and news through the Tribal Media Center, Native Lens, and Native Braids programs.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measureable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

The partners of the Tribal Water Media Fellowship are all physically located in the heart of the Southwest's critical water issues and Tribal lands issues. Each partner brings stability and strengths to create robust synergies and long-term collaborations benefiting students and our region.

KSUT, via the Tribal Media Center and Tribal Radio, help to provide both vital inroads to local Native American communities, but they also bring experience in broadcast media training specific to Native American participants.

Rocky Mountain PBS is a vital partner as a steward over the Ballantine Media Center which will be vital in the fellowship workshop as a training location as well as a creative space. Besides providing this crucial resource, RMPBS is also a distribution hub for projects to reach a 500,000-strong audience within the state. Their regional presence in Southwestern Colorado as a hub of information, entertainment, and education helps to inform other regions of Colorado to important local issues.

Fort Lewis College's campus in Durango, is home to the Four Corners Water Center, the Center for Southwest Studies, and Fort Lewis on the Water. Each of these pedagogical centers builds upon on another by layering theory, praxis, and different academic fields into an intersectional framework that meets challenges and learning with ambition and innovation. Besides having the innovative programs, Fort Lewis serves a demographically diverse student body with over 55% of the student body being people of color.

The fellowship is initially hoping to have 10-15 students as part of the pilot program, but if it is successful, it is possible to create an annual fellowship that brings in more students and mentors to the area while also highlighting different topics of the region; such as water conservation, water usage, and tribal water rights, for a larger audience.

By creating an annual fellowship focused on local Native communities' issues and water conservation/usage, this partnership hopes to further the cause of water protection in the area, but also in Colorado and the greater Southwestern region. This will be furthered by giving training to future residents, scientists, and media professionals the tools to communicate the vital research, evolving practices, and up-to-date information in methods that average citizens can both comprehend and integrate into their lives.

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.

The Tribal Water Media Fellowship has several major tasks that can be broken down into three phases of development.

Recruitment:
The first phase of this fellowship is recruiting student participants, project mentors, and experts-in-residence for the Spring workshop intensive.

- In October the recruiting process for students began with the creation of the online application, as well as contacting and communicating with relevant Fort Lewis College faculty, staff, and community members about the fellowship.
- In November the application will be published and available for students to apply should they choose. The partners will start to recruit for the during the unofficial 'Water Week' at Fort Lewis College.
- In December the two experts-in-residence, one for media and one for water, will be contacted and their participation finalized.
- The application will remain open until February 28th and will be reviewed by Fellowship partners through mid-March.
- In March, with an estimate of the number of student participants, the fellowship partners will begin finalizing project mentors for the fellowship.
- Throughout March, coordination with the mentors and experts on travel to Fort Lewis, accommodations, and workshop details will take place. These will be finalized by the end of the month.
- In April, before Spring Break, applicants will be notified of their acceptance into the Fellowship after being notified participants will be sent an itinerary and schedule for the May intensive.

Intensive & Participant Projects Phase:
The next phase will begin with the May workshop intensive and extend through Summer and into the beginning of the Fall 2023 semester for Fort Lewis College.

- The 10-day workshop intensive will take place from May 8th through May 17th and will include media training, lectures on water topics, as well as social activities overseen by mentors and TWMF partners.
- During the 10-day intensive the student participants, experts-in-residence, and select mentors will take part in a river float trip administered by Fort Lewis On the Water (FLOW). This will take place from May 11th – May 13th on either the San Juan or Chama rivers.
- During the intensive student participants will also start to conceptualize the long-term project that they will work on after the intensive is over.
- From June through early September, participant students will be actively working on their media projects in conjunction with both media and water mentors.
- In September mentors and experts-in-residence will be contacted about possible plans to attend the public presentation of the fellows' projects.
- By the end of September participants will have completed the production of their project and will focus on project deliverables for the public presentation and the final reports for grant providers.

Public Presentation:
The final phase for the project will be

- By October the experts, and mentors who can attend the presentation, will have their travel and accommodation plans finalized by TWMF partners.
- The TWMF will hold a public symposium/presentation with lectures provided by the experts-in-residence as well as the presentation of the fellowship projects during the last full week of October 2023. The event date will be determined in conjunction with the institution that will host the event (Fort Lewis College, Center for Southwest Studies, etc.).
- After the event the fellows will meet with mentors to decide whether or not they would like their projects publicized in a media outlet and how to prepare the project to be delivered to the outlet(s).
- The projects, after they are published or broadcast via KSUT or RMPBS, will be curated into a fellowship collection. If the fellowship becomes an annual practice, this collection will hold all the fellows' completed projects.

ENGINEERING AND LEGAL FEASIBILITY

Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.

No.

Will the Project require state or federal regulatory permits of any type? If yes, please explain.

No.

Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

The fellowship's expenses are mainly allocated to a couple of key areas. Most of the fellowship's expenses, $55,400, are going towards the operations for 10-day workshop intensive and the mentorships and projects that follow. These expenses are mainly formed around stipends being administered to the student fellows and for the cost to Fort Lewis College for housing and hosting the workshop intensive, as well as the 3-day FLOW trip down the San Juan river during the intensive. The second area with the most expenses, $53,900, in the fellowship is in the development and administration of the fellowship. These costs are accrued through the stipends devoted to the fellowship experts, mentors (both for the intensive and the following project), and fellowship partner organizations. Outside of these two areas, there is significant apportions of the fellowship expenses planned for equipment (including media equipment, water monitoring equipment, van rentals, consumable materials) and possible financial aid for students to allow them to earn course credit available to them through FLC.

Similar to the expenses, the current funding for the fellowship is built around a handful of key grants; the most prominent being a $110,760 from the Walton Family Foundation, this grant

forms the basis for the fellowship's funding. As the fellowship advanced, and with current economic trends looking to continue, it was decided to seek additional funding to maximize the fellowship's potential effectiveness and longevity. The partners sought, and were awarded, a $25,000 Capacity Building grant from the Colorado Plateau Foundation to help with the expected financial shortfall. While this has helped to bridge most of the gap, the fellowship partners are still seeking additional grants and possible sponsorship funding from local organizations and individuals.

Besides these expenses and sources of funding, the various partners in the fellowship are offering at least $35,000, with possibly more depending on necessity, in in-kind services. These services are primarily in the fellowship administration being done by various individuals within FLC, RMPBS, and KSUT. Besides the services provided in the fellowship administration, the three organizations are also contributing in hosting the fellowship intensive, the ensuing projects, or distribution services of the final projects. Some of these in-kind contributions include such spaces as the Ballantine Media Center (which is a part of a partnership between RMPBS and FLC) being available for fellowship media workshops and eventual project usage. These types of contributions are invaluable since they provide equipment and infrastructure that is both expensive and difficult to come by in the area.

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
Fort Lewis College	$16,000 in-kind services rendered
Rocky Mountain Public Media (RMPBS)	$10,000 in-kind services rendered
KSUT Public Radio & Tribal Media Center	$9,000 in-kind services rendered
Total Applicant Match (At Least 25%)	$35,000.00
Total Other Funding	$ 135,760.00
SWCD Request (Up to 50% of Project Cost)	$5,000
Total Project Cost	$137,160.00

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
Fellowship operations – stipends, FLOW Trip,	Walton Family Foundation	$110,760

community events.		
Expert, mentor, and fellows travel to Durango, CO, and during duration of projects	Colorado Plateau Foundation	$25,000
Workshop intensive operations – media equipment including cameras, video equipment, processing software, water quality monitoring equipment, and vehicle rentals.	SWCD	$5,000
Total Project Cost		$137,160
Grant Administration Costs as a Percentage of Total Project Cost		% 17

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

2018 – $15,000 - Animas River Microbial Communities Study – Dr Jennifer Lowell

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

See attached audit report –
https://leg.colorado.gov/sites/default/files/documents/audits/issued_fs_fort_lewis_college_june_30_2021_and_2020.pdf

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

N/A

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

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In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

D. Walsh
Signature

12/08/2022
Date

Printed Name DAMIAN WALSH

As Authorized Representative for Fort Lewis College

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application:
Laura Spann, 970-247-1302, lauras@swwcd.org.

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SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
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2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

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DR	I understand that SWCD does not fund payroll, legal, or grant administration costs.
DR	I have included a detailed project expense budget.
DR	I have included a detailed project funding budget.
DR	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
	Feasibility and/or Engineering Studies
DR	Maps or Photos
	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal	11/4/2022		
Type of Request	Grant YES	Loan	Grant/Loan Package
Project Name	FCDC West Lateral Repair		
Applicant	Florida Consolidated Ditch Company		
Project Location (River Basin & County)	Southwest	La Plata	
Amount of Request	$45,000.00		
Total Project Cost	$120,000.00		
Applicant Match	$30,000.00 (Cash)		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
X	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding received in any given five-year period, as well as the total amount allocated to each category by		

the board. Review the guidelines carefully and consult staff if needed (970-247-1302).

APPLICANT INFORMATION	
Name of Qualified Entity	Florida Consolidated Ditch Company
Type of Qualified Entity (See Guidelines)	Mutual Ditch or Reservoir Company
Mailing Address	691 CR 233 Ste. B1A Durango, Colorado 81301
Federal ID Number	84-0204321
Public Water System ID (if applicable)	
Contact Person	Darren Rowley
Position/Title	Operations Manager
Phone Number	970-749-9800
Email	floridaditch@gmail.com

APPLICANT DESCRIPTION

Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment.

Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

The Florida Consolidated Ditch Company is a mutual ditch company that delivers adjudicated water to 223 shareholders and ~1300 project water users for the Florida Water Conservancy District from Lemon Dam. We provide water to between 15,000 and 18,000 acres of irrigated agriculture through the upper and lower Florida Mesa area. Additionally, the Florida Consolidated Ditch Company provides water to Pastorious Reservoir State Wildlife area.
In total, the ditch company operates 86.5 miles of canals, ditches, and laterals, and delivers approximately 43,250 acre-feet of water per year. There are 6,200 shares in total. This project would directly impact 30 shareholders and 840 acres. The current assessment is $40.30 per share. The annual O&M assessment is currently $70.00 per shareholder. These funds are matched by the Florida Water Conservancy District for delivering project water from Lemon Dam. The ditch company board has approved raising the assessments by ~13% and is waiting for shareholder approval at the annual meeting. The Florida Water Conservancy Board has also approved matching this increase to help fund these types of projects. The Florida Consolidated Ditch Company also has ~$200,000.00 in savings to cover unexpected emergencies and grant matching requirements.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measurable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

This project will include repairing the failing portion of the West Lateral Ditch owned by the Florida Consolidated Ditch Company. The West Lateral serves 30 Shareholders and 840 acres would be directly impacted. Due to the instability of the ditch bank, the repair involves installing an impervious liner which will be protected with 3" of shotcrete for the long-term stabilization of the ditch.

The West Lateral Ditch is a 60+-year-old ditch that has issues believed to be caused by a variety of environmental conditions that include tree root systems and burrowing creatures that are creating a conduit for ditch seepage and potential erosion, along with the fact that the ditch is located on top of a steep slope. This ditch is currently leaking which greatly increases the risk of catastrophic failure! This is a safety concern for The Elevation Park Subdivision and Hwy 160 in the Grandview area.

This project is a critical water infrastructure to continue to provide water to a large agricultural area. At the startup of our 2022 season, the seepage was discovered, resulting in the ditches being turned off for over 5 days until a temporary fix was completed. Due to drought conditions, it is imperative we deliver water as efficiently and effectively as soon as possible. This was valuable time lost for farmers and ranchers getting water for their crops. There are approximately 40 miles of ditch south of the damaged area of the West Lateral which supports a large agriculture area on the south Florida Mesa supplying both adjudicated and project water to farmers and ranchers. It also impacts the fish habitat when the flow is abruptly stopped. Therefore, this project has an impact not only on agriculture but environment and recreation as the ditch is a supply source for the Pastorious Reservoir State Wildlife area. A ditch failure could greatly impact the fish, waterfowl, and wildlife in the area, in addition, Pastorious Reservoir is a recreation area for fishing, hunting, kayaking, boating swimming, etc.

Florida Consolidate Ditch Company and Florida Water Conservancy District in partnership with the Nature Conservancy participate in the instream flow program to promote and maintain a healthy watershed. The Florida Consolidate Ditch Company is a non-profit, shareholder-owned (through pre-compacted water rights certificates).

Pre-compacted water rights held by FCDC as recorded in our By-laws.

Section 3: Classes of Stock. There shall be four (4) classes of shares

"A" shares will be issued to former Shareholders of the Florida Farmers Ditch Company, and shall be assigned the following water priorities:

- Priority F-17 12.08 c.f.s.
- Priority F-21 1.333 c.f.s
- Priority F-22.5 8.58 c.f.s.
- Priority F-24 23 c.f.s

"B" shares will be issued to former Shareholders of the Florida Canal Company, and shall be assigned the following water priorities:

- Priority F-23 24 c.f.s
- Priority F-29 16 c.f.s

"C" shares will be issued to former Shareholders of the Florida Canal Enlargement Company, and shall be assigned the following water priorities:

- Priority F-68 40 c.f.s

"D" shares will be issued to former Shareholders of the Florida Cooperative Ditch Company, and shall be assigned the following water priorities:

- Priority F-84 30 c.f.s

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.

Florida Consolidated Ditch Company will hire contractors to contour the ditch and install the impervious liner and shotcrete to a 400 ft section of the ditch. Installing an impervious liner and shotcrete is the most effective way of repairing the damaged area of the ditch.
Per Job: Pump ditch out, to rid the ditch of all puddles 2 weeks prior to starting the work. Continually check on it to make sure no water has gotten in.
Dig and shape the ditch to take the pond liner. Scarify and compact the entire ditch

system where the liner will be placed to a good compaction ratio. Dig anchor trenches along all sides of where the liner is going to go. Anchor trenches will be approximately 13" wide by 13" deep.
Install premade liner in the canal. Push down into the anchor trenches, backfill, and compact these to the best of our ability with a jumping jack. FCDC to perform onsite observation of contractor progress, respond to Contractor requests for information, develop and distribute weekly progress meeting minutes if needed during construction, and review contractor pay application requests.
The project should be completed in less than 30 days. We are looking at a projected start day of March 1st and finished by March 25th.
By repairing the ditch, we will take away the potential catastrophic safety risk to Elevation Park and the Grandview area of Hwy 160, in addition, we expect a water savings of approximately 1 acre foot per day.

ENGINEERING AND LEGAL FEASIBILITY
Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.
No agricultural water rights will be affected by this project.
Will the Project require state or federal regulatory permits of any type? If yes, please explain.
There are no permit issues.
Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.
Since this is a construction (repair) project, no feasibility studies or investigations will be required.

WATER ACTIVITY BUDGET
Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved. Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.
On October 27, 2022, the Southwest Basin Roundtable awarded a $45,00.00 grant toward the project. With a $45,000.00 grant request from Southwestern Water Conservation District, Florida Consolidated Ditch Company will be adding $30,000.00 (25%) cash for the completion of this project. Any administration cost will not be charged to the project, provided as an in-kind service to the project. Florida Consolidated Ditch Company along with supporting funds can pay the full cost of this Project.

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
Southwestern Basin Roundtable	$45,000.00 Grant
Total Applicant Match (At Least 25%)	$30,000.00 (Cash)
Total Other Funding	$45,000.00
SWCD Request (Up to 50% of Project Cost)	$45,000.00
Total Project Cost	$120,000.00

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
Construction	Applicant, Roundtable, SWCD	$120,000.00
Details below		
	Total Project Cost	$120,000.00
Grant Administration Costs as a Percentage of Total Project Cost		0%(In-Kind Applicant Services)

Items	Units	Unit Price	Roundtable Awarded Grant	SWCD Grant	FCDC Matching Funds
Pump out Ditch	1 day	$ 1,200.00	$ 450.00	$ 450.00	$ 300.00
Purchase Liner 30mil	7,350 Sq. Ft.	$ 10,000.00	$ 3,750.00	$ 3,750.00	$ 2,500.00
8 oz. Geotextile	14,700 Sq Ft.	$ 13,814.00	$ 5,180.25	$ 5,180.25	$ 3,453.50
Mobilization of Equipment	1	$ 750.00	$ 281.25	$ 281.25	$ 187.50
Excavation	5 days	$ 14,500.00	$ 5,437.50	$ 5,437.50	$ 3,625.00
Installation of Liner	1 day	$ 2,750.00	$ 1,031.25	$ 1,031.25	$ 687.50
Install Shotcrete	6,000 Sq Ft.	$ 70,000.00	$ 26,250.00	$ 26,250.00	$17.500.00
Contingency	LS	$ 6,986.00	$ 2619.75	$ 2619.75	$ 1,746.50
		$ 120,000.00	$ 45,000.00	$45,000.00	$ 30,000.00

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

2018, $55,000: Florida Canal Diversion Structure Rehabilitation Project Phase 1.
2020, $25,000: Florida Canal Diversion Structure Rehabilitation Project Phase 2.

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

Florida Canal Diversion Replacement (Anticipated to begin in 2023)
Lender: CWCB
CWCB Water Project Loan: 750,000
Colorado Water Plan Grants: 175,000
WSRF Southwest: 25,000
WSRF Statewide: 250,000
Total Project Cost: $1,200,000
Annual Loan Payment: $33,721

Maturity Date: (estimated): 2050

FOR LOAN REQUESTS
Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.
No loan request.

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the ***Request for Release of Funds*** form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Signature Darren Rowley

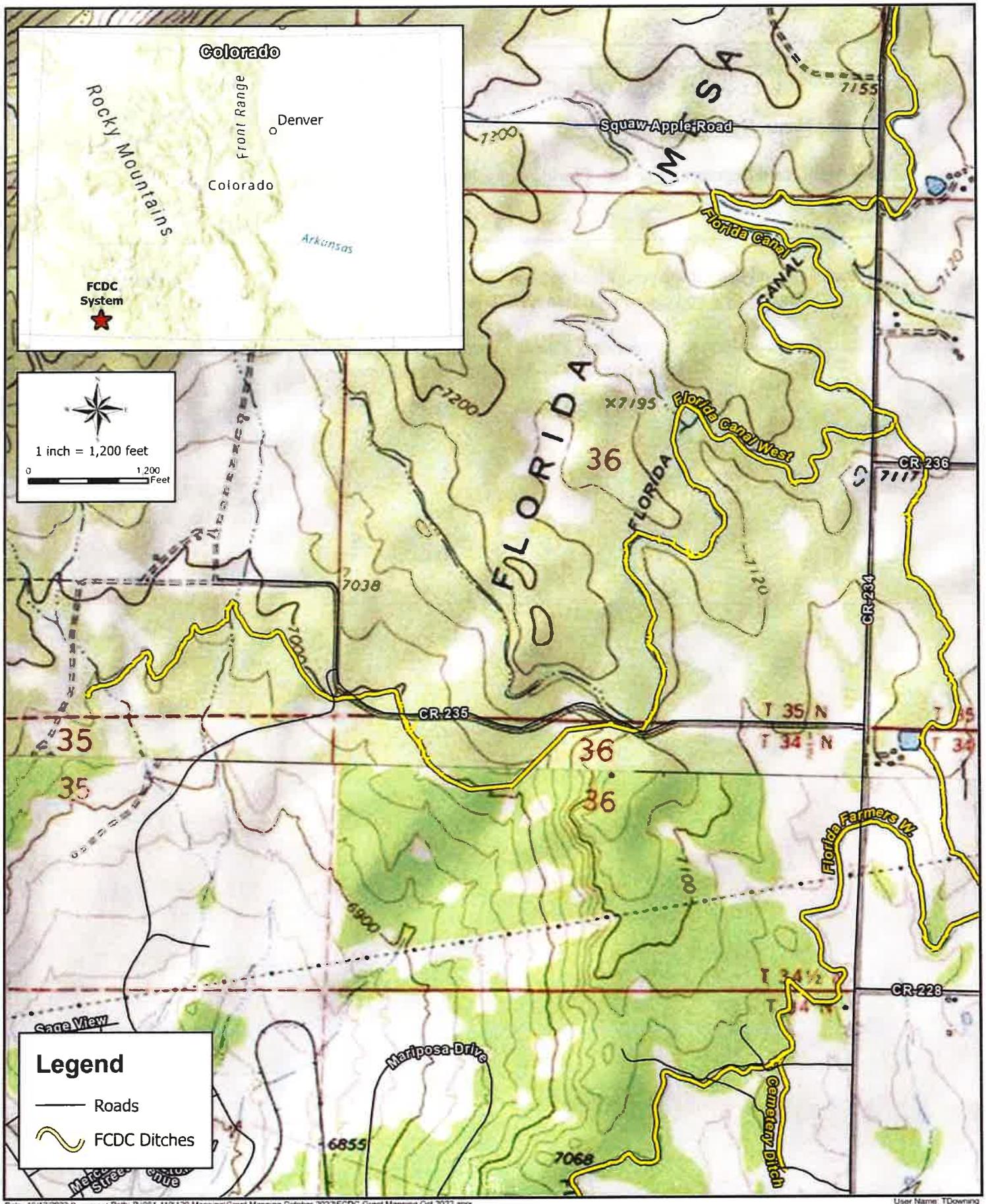
11/3/2022
Date

Printed Name: Darren Rowley

As Authorized Representative for: Florida Consolidated Ditch Company

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application:
Laura Spann, 970-247-1302, lauras@swwcd.org.



Date: 10/12/2022 Document Path: P:\061-110\120 Mapping\Grant Mapping October 2022\FCDC Grant Mapping Oct 2022.aprx

User Name: TDowning

WWE
Wright Water Engineers, Inc
1666 N. Main Ave., Ste C
Durango, CO 81301
(970) 259-7411 ph 259-8758 fx

LA PLATA COUNTY, CO

FLORIDA CANAL WEST

FCDC

PROJECT NO. 061-110.120

FIGURE 1

THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
MS	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
MS	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
MS	I have attached the applicant's financial statements to demonstrate adequate reserves.
MS	The financial request to SWCD does not exceed 50% of the total project cost.
MS	The applying organization is funding at least 25% of the total project cost.
MS	The request is for funds to be used in 2023, for a project to be completed in 2023.
MS	I understand that SWCD does not fund payroll, legal, or grant administration costs.
MS	I have included a detailed project expense budget.
MS	I have included a detailed project funding budget.
MS	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
	Feasibility and/or Engineering Studies
	Maps or Photos
	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal	12/9/2022		
Type of Request	Grant	Loan	Grant/Loan Package
Project Name	Community Consensus Institute and Special Workshops		
Applicant	Mancos Conservation District		
Project Location (River Basin & County)			
Amount of Request	$8500		
Total Project Cost	$17,000		
Applicant Match	$4250		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
X	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).		

APPLICANT INFORMATION	
Name of Qualified Entity	Mancos Conservation District
Type of Qualified Entity (See Guidelines)	Public entity
Mailing Address	PO Box 694 Mancos, CO 81328
Federal ID Number	84-0614777
Public Water System ID (if applicable)	
Contact Person	Sensa Wolcott
Position/Title	Watershed Coordinator
Phone Number	(970) 533-7317
Email	mancoscd.coordinator@gmail.com

APPLICANT DESCRIPTION

Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment.

Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

Conservation Districts began in the 1930's as a result of soil erosion during the Dust Bowl but have evolved into a unit of local government. They utilize a variety of resources to work toward solutions for today's natural resource problems. The Mancos Conservation District's (MCD) mission is to "promote long-term sustainable use and protection of the Mancos River Watershed. We provide educational, financial, and technical assistance to meet these conservation goals." To meet our mission, MCD supports rural and urban landowners by providing information, technical and engineering support, and access to government cost-sharing programs. The MCD is dedicated to supporting community consensus to reach our conservation goals in a way that's responsive to our stakeholders needs.

Since our conception in 1948, MCD has taken a leading role in watershed planning and projects in the Mancos watershed. Recently, MCD has completed Phase I of the Mancos Watershed Stream Management Plan (MWSMP) and has moved into Phase II where we will stress the importance of receiving stakeholder feedback to build the language of our management plan. MCD is committed to securing and improving our dialogue with agricultural producers, town members, environmentalists, tribal members, and recreationalists. Therefore, MCD has identified the need to host community wide workshops through the Community Consensus Institute (CCI) to gain this feedback and to build bridges across our diverse community.

The MCD 2023 budget is estimated at $1,859,710, with 95% of this total secured from grant revenue designated for planning, engineering and project implementation outside of this grant request. While this budget amount reflects MCD's success with grant acquisition, our long-term sustainability with unrestricted funding is at 5% of our annual budget. MCD continues to work on long-term sustainability and the continuation of pilot projects and programs once grant funding has ended. We do this through utilizing the 5% of unrestricted funding once grant eligibility has passed. While our financial sustainability sans grants are more fluid than hoped, we can minimize expenditures elsewhere, such as office space. We were given our current office and property by a local landowner in the 1950's. While these cost-cuts are a significant aid in the sustainability of our organization and show great confidence from our stakeholders in the work we do, it does not mitigate the need for grant dollars to continue to support projects that will allow us to better serve our constituents.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measurable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

The Mancos River Watershed has headwaters in the La Plata Mountains and flows out of state into the San Juan River. The Mancos Rivers' role as a tributary and its importance for industry in the Mancos Valley makes it an invaluable resource. However, there is a gap in the importance of this resource and the community's knowledge of how they utilize and interact with the river. Since the Mancos River supports the entire Mancos community in a variety of ways, maintaining the health of this vital water source is imperative to the community that relies so heavily on it. Water quality, quantity and timing affect all water users, including municipal water users. Poor water quality and reduced water quantity have the potential to impact municipal water users and increase the complexity of providing safe water to people of the Mancos Watershed. Ensuring that everyone in the Mancos Watershed has access to local, clean and affordable water helps enable community members to meet their household needs affordably. The more everyone understands about the water resources they rely upon and are connected to and the more they can share about what they wish to see out of the system, the more effective MCD will be at ensuring systems and conservation projects will be focused on achieving these goals.
As we rewrite our MWSMP, we are actively seeking community member buy-in via participation at our four CCI Workshops, "One Watershed – One Community." This community input will allow us to determine how Mancos wants to use their water and allows participants to reexamine their relationship to our watershed and its resources. The goal of this work is to provide MCD with stakeholder feedback on how we can proactively manage, and conserve watershed resources as needed by the community while still upholding water rights for agricultural producers. Currently there are 161 water rights associated with the 49 active irrigation structures in the Mancos Valley, with seventy percent of these appropriated senior to the Colorado River Compact. Therefore, a well-designed management plan will benefit all water rights stakeholders in the Mancos Valley.

By partaking in our CCI workshops community members are not only given an excellent opportunity to shape conservation efforts in the Mancos Valley but they also grow in sense of community. As a Special District, one of our main goals is to better serve private landowners and the community in which we reside. The CCI is a fantastic way for us to serve not only landowners who currently have ongoing projects in collaboration with MCD but also all other stakeholders and municipal water users in the Mancos Valley. Through connecting our agricultural producers to our recreationalists, non-profit representatives, and other municipal water users we will gain an insight in how the entire Valley can work together to reach our shared goals. These CCI workshops will allow us to not only get these stakeholders in the same room but will also provide tools to community members who participate to facilitate

conversations between these groups. The CCI is not only a planning process but feedback from our first workshop showed that all water users are connected by the same concerns; there is a lack of water in the Mancos Watershed and increasing access and availability to water is a must. MCD has felt how these experiences are both beneficial and empowering for our community. We are expecting that through hosting these workshops we can gain more community commitment and buy-in to conservation projects initiated by MCD. In addition, it will create more open dialogue between MCD and the community.

Through gaining additional support for our workshop MCD will have increased capacity to serve and encourage our stakeholders to attend our "One Community-One Watershed" workshops. This is due to the demand that coming to the CCI has on participants. Since they are full workdays, we are asking participants to take off work which is difficult for many. Due to this demand, we are providing breakfast and lunch to all participants. This cost is outside of pre-existing grants that are covering the rest of the cost of the CCI including venue space and contractor fees. In addition, having additional funding outside of the original grant constraints will allow MCD to have more flexibility in how we reach other portions of our community during our MWSMP planning process. Our goal is to provide an abbreviated workshop for middle schoolers and agricultural producers as these community members are vital to understanding the needs of the water in the valley, and those who will be the future stewards of this area. However, both groups do not typically have full weekday availability. Therefore, having staff capacity to create, support, and supply these shortened workshops would be greatly beneficial to both MCD and the community. In addition, following the CCI and MWSMP process, MCD is planning on celebrating the input community gave while unveiling our collective goals following CCI. This would allow us not only to thank participants but also showcase and launch our management and conservation goals.

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.

I. Task 1: Community Consensus Institute "One Community-One Watershed" for General Participants
   a. MCD will host and facilitate three "One Community-One Watershed" CCI meetings. They will each last three days and run from 8 AM to 5 PM where we will provide breakfast and lunch. These workshops will be attended by Mancos Valley Community Members and will provide vital community feedback for the MWSMP.
   b. Target Completion: September 2023

II. Task 2: MCD will host and facilitate special "One Community-One Watershed" workshops and meetings that have been restructured to meet the needs of special participants
   a. MCD's Watershed Coordinator will restructure, reformat, and purchase supplies for special workshops that will be facilitated to groups who may not be able to attend our general CCI meetings. This will include agricultural producers and middle schoolers.
   b. Targeted Completion Date: This will be completed by December 2023

III. Task 3: Continued Resource Delivery of CCI learning materials
   a. MCD has committed to continue to deliver CCI learning materials, including the purchase of books for all participants who would like them, and the completion of a learning manual based on our specific workshops.
   b. Targeted Completion Date: This will be done following the end of the workshops in 2023

IV. Task 4: MCD will report our MWSMP and CCI work back to the community through a Community Celebration.
   a. MCD will plan and host a workshop that will bring our CCI feedback back to the community through a celebration that showcases the consensus reached while thanking stakeholders for their participation.
   b. Target Completion Date: December 2023 following the end of all workshops, both formal and informal

V. Task 5: Project Management and Administration
   a. The MCD Watershed Coordinator will serve as the coordinator and assistant facilitator to all these events. In addition, they will coordinate and complete the production and ordering of all necessary project materials. MCD will also be responsible for administering the grant and all reporting processes.

ENGINEERING AND LEGAL FEASIBILITY

Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.
No
Will the Project require state or federal regulatory permits of any type? If yes, please explain.
No
Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.
N/A

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

MCD is requesting $8500 to assist in offsetting the cost of engaging our community stakeholders through special Community Consensus Workshops during Phase II of our MWSMP process.

Budget and Schedule: In 2023, MCD will facilitate stakeholders through our formal "One Community – One Watershed" CCI workshops. In addition, we will reach harder to engage stakeholders through informal or restructured CCI workshops, including workshops for youth and agricultural producers. There will be three formal workshops that require funding for meals and supplies, and at least two additional workshops that require additional funding for supplies. We will also be purchasing materials for participants. This includes a binder and printouts of a learning manual specific to workshops that participants attended and a copy of the book *Finding New Ground* by Robert Chadwick which serves as a resource on what community consensus is and how it can be reached beyond the scope of our workshop. Additionally, we will be hosting an event at the end of the CCI process that will share the feedback we received, outline the goals developed through this process, and celebrate stakeholder involvement, at which we will provide hors d'oeuvres.

Meals for participants ($20/person/day)	$7200
Finding New Ground – Robert Chadwick ($25/book)	$2000
Learning Manual (approx. 80 at $30 (binder & printing costs)	$2400
Celebration/Community Event (cost of hors d'oeuvres)	$700
Special Workshops (additional cost of supplies)	$450
Project Management	$3250
Grant Administration	$1000
Total	**$17,000**

Cash Contributions: MCD is committing $4,250 in cash to cover the project management and grant administration. This cash match will come from MCD's Mill Levy revenues and unrestricted reserves. MCD's Watershed Coordinator will oversee the project ($3,250). The Watershed Coordinator is calculated at a $50 rate per hour for project management. The MCD Financial Administrator will administer the grant ($1,000). The Financial Administrator is calculated at a $50 rate per hour for grant administration.

Position	Project Hours
MCD Executive Director	20 hours
MCD Watershed Coordinator	65 hours
Total Hours	85 hours

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
The Nature Conservancy	$4250 (cash)
Mancos Conservation District	$4250 (cash)
Total Applicant Match (At Least 25%)	$4250
Total Other Funding	$4250
SWCD Request (Up to 50% of Project Cost)	$8500
Total Project Cost	$17000

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
Task I -food	TNC, SWCD	$7200
Task II -special workshops/supplies	SWCD	$450
Task III -learning materials	TNC, SWCD	$4400
Task IV-celebration	SWCD	$700
Task V-MCD grant admin/project management	MCD	$4250
Total Project Cost		$17,000
Grant Administration Costs as a Percentage of Total Project Cost		6%

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

2009 – Mancos Valley Watershed Management Project - $15,000
2010 – Tech Assistance to Mancos River Watershed Project - $15,000
2011 – Tech Assistance to Mancos River Watershed Project - $15,000
2012 – Mancos River Diversion Project - $15,000
2013 – Mancos River Diversion Project, Montezuma STFP, Bolen & Sheek Ditches - $43,000
2014 – Mancos River Diversion Project - $15,000
2015 – Mancos River Diversion Project - $15,000
2016 – Montezuma STFP - $20,000
2017 – Montezuma STFP – $20,000
2020 - Mancos Watershed Stream Management Plan, Phase I - $13,746 (Public Forum/Studies)
2022- Water Quality and Urban Water Conservation Plan Grant -$5,000
2022-Mancos Valley Smart Metering Project Grant -$25,000

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

N/A

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

N/A

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines. I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the *Request for Release of Funds* form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Signature: Sensa Wolcott Date: 12/7/22

Printed Name: Sensa Wolcott

As Authorized Representative for: Manios Conservation District

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application:
Laura Spann, 970-247-1302, lauras@swwcd.org.

THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
JML	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
JML	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
JML	I have attached the applicant's financial statements to demonstrate adequate reserves.
JML	The financial request to SWCD does not exceed 50% of the total project cost.
JML	The applying organization is funding at least 25% of the total project cost.
JML	The request is for funds to be used in 2023, for a project to be completed in 2023.
JML	I understand that SWCD does not fund payroll, legal, or grant administration costs.
JML	I have included a detailed project expense budget.
JML	I have included a detailed project funding budget.
JML	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
	Feasibility and/or Engineering Studies
	Maps or Photos
	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal	December 8, 2022		
Type of Request	Grant X	Loan	Grant/Loan Package
Project Name	Water Education at Fozzie's Farm		
Applicant	Montezuma Land Conservancy		
Project Location (River Basin & County)	Southwest Basin (Dolores, San Juan), Montezuma County		
Amount of Request	$5,000		
Total Project Cost	$39,800		
Applicant Match	$14,700		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
X	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding received in any given five-year period, as well as the total amount allocated to each category by		

the board. Review the guidelines carefully and consult staff if needed (970-247-1302).

APPLICANT INFORMATION	
Name of Qualified Entity	Montezuma Land Conservancy
Type of Qualified Entity (See Guidelines)	Non-profit
Mailing Address	PO Box 1522, 216 W. Montezuma Ave., Cortez CO 81321
Federal ID Number	31-1632961
Public Water System ID (if applicable)	
Contact Person	Jay Loschert
Position/Title	Community Programs Director
Phone Number	970-799-1475
Email	jay@montezumaland.org

APPLICANT DESCRIPTION

Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment.

Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

Montezuma Land Conservancy (MLC) was founded in 1998 to assist local landowners with completing voluntary conservation easements on their private property to protect farm and ranch lands, wildlife habitat, and open space. Since then, we have protected over 46,000 acres in Montezuma, Dolores, and San Miguel counties. We are a private, not-for-profit organization with the mission of "Changing lives through land conservation by connecting people to place, forever."

Since 2015 MLC has expanded its mission to include a more community-focused strategy. This shift reflects the needs of landowners for education about soil and water conservation practices, the decline in connection to the natural world that young people face, and the lack of resources for young adults looking for meaningful work in the outdoors. In 2016 MLC received a generous donation of an 83-acre property in Lewis, Colorado called Fozzie's Farm. The irrigated farm has become the hub for our Community Programs, while remaining in agricultural production. We have served over 2,200 youth and 600 adults and families with school field trips, landowner workshops, and summer "pathways" programs that prepare youth for careers in agriculture, resource conservation, and research.

Most of these education programs include elements that builds water literacy. Managing Fozzie's Farm has driven home for MLC the need to include water conservation with any discussion about land stewardship. The rural character of our community and its rich agricultural heritage revolves around our understanding of the local hydrology and its management. Yet few outside of those who actively farm or ranch fully understand or appreciate water's value and our collective dependence on it. Our education programs are actively changing that.

Financial support for these programs has largely come from grants, including through the Montezuma Inspire Coalition (MIC) with funds from Great Outdoors Colorado (GOCO). While this support continues through 2023, we have been actively building new relationships with

other funders to supplement revenue generated by the farm enterprises.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measureable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

This project is designed to expand existing education programs at Fozzie's Farm, specifically the two summer pathways programs: Agriculture Immersion and Fozzie's Farm Internships. Both incorporate hands-on and field trip experiences to engage high school youth with understanding watershed issues, irrigation delivery systems, regional hydrology, and the impacts of climate change on irrigation supply. Students meet with local water leaders, other farmers and ranchers, local scientists, and tribal professionals to better understand what career options they may explore and how the water landscape is changing. They develop a keen understanding of the Dolores River watershed and the inter-basin diversion through McPhee Reservoir into the Montezuma Valley and San Juan basin.

The Agriculture Immersion Program offers up to 12 local youth a month-long exploration of local farms, ranches, and resource management sites. They attend for eight hours per day, four days per week for the month of June. In addition to becoming familiar with the projects and management of Fozzie's Farm, they travel across the region to experience the breadth of careers in the field. For their full participation they receive nutritious meals, a weekly stipend and school credit. With additional funding through this grant program, we hope to attract even more participation in the Agriculture Immersion Program by increasing the weekly stipends for students.

Fozzie's Farm Interns start working in the spring to help prepare for the growing season. As

local schools are not in session on Fridays, they can get a jump on their summer hours as early as April. Once school is out for the summer, they average around 20 hours per week for 10-12 weeks. Then they go back to a Friday only schedule once the school year resumes, as funding allows. Typically, we hire 3-5 youth each year, with several opting to return the following season. They are paid an hourly rate for approximately 300 hours each per season. If awarded, SWCD funds will be used to expand the scope of this program by offering interns more hours into the shoulder seasons and a modest increase in the hourly rate to keep our wages competitive.

Both programs are based at Fozzie's Farm, which is in Montezuma County about 12 miles north of Cortez in Lewis. The 83-acre farm and ranch is irrigated with 60 shares of water from Montezuma Valley Irrigation Company. About half of the farm is watered with flood irrigation through gated pipe, and half is under side roll sprinklers. We produce mixed forage, selling hay and leasing pasture to local livestock producers. Since taking over management in water year 2017, our focus has been on improving soil health through rotational grazing, expanding diversity, and planting cover crops with minimal tillage. Increasing soil carbon has become a key strategy for resilience, as we anticipate future uncertainty of irrigation supply; more organic material allows greater water storage in the soil.

When youth participate in our summer programs, they play an active role in these processes. For many it is their first exposure to agriculture, and it provides an authentic and deep connection to the land. Both summer programs (along with the school field trips and landowner workshops) incorporate an experiential learning model. During the summer months they focus on learning the practical skills of irrigating, learning to assess soil moisture and adjust water applications as indicated. By the end of their experience, the interns become adept at trouble-shooting problems with water delivery systems and can explain the origin and journey of the water from mountains to farms.

These experiences deliver multiple benefits, including a chance to connect to the land and water of our community, build positive relationships with peers and trusted adults, and stay physically active and healthy. For SWCD, these programs offer the chance to introduce the next generation of water users and leaders to the issues they will face as adults. The Colorado Water Plan emphasizes the need to create a water-savvy public. Understanding the critical nature of water to agriculture is an important step in that education process, and Fozzie's Farm serves as the classroom for these youth.

In addition to these summer programs for teens, most visitors to Fozzie's Farm leave with a better understanding of the water issues in our community. Last year we hosted several community events at the farm to expand water awareness. In June we hosted the second part of a summary presentation of an irrigation research project and a hands-on Irrigation Water Management Workshop with our partners at NRCS. Mountain Studies Institute and the Water Information Program presented the Forests to Faucets teacher workshop at Fozzie's Farm. MLC staff also visited numerous classrooms and the Four States Ag Expo for presentations to students about water.

WATER PROJECT TIMELINE
Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.
The Agriculture Immersion Program is offered during the month of June 2023, with recruitment of participants beginning in April and the application and selection process concluding by mid-May. On the final day of the program (June 29), we invite families to a cookout at the farm to celebrate the students' achievements. The Program Director works part-time during the weeks preceding the program to recruit and select participants and plan field trips. The contract concludes at the end of June when the program ends. The Fozzie's Farm Internship Program begins as early as April, with the interns starting work on Fridays when school is not in session. During the summer break from school, their 20-hour per week schedule begins and continues through early August. Depending on available funding, their work schedules return to just Fridays when the school year resumes and continues through the month of September.

ENGINEERING AND LEGAL FEASIBILITY
Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.
NO
Will the Project require state or federal regulatory permits of any type? If yes, please explain.
NO
Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.
N/A

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

Both summer programs require the capacity of MLC staff, specifically the Community Programs Director. Salaries and benefits for that staff position also cover capacity for managing and delivering other programs. Transportation costs for both programs are currently funded at $800, which offsets fuel costs for daily transportation and field trips. Those budget items are currently fully funded through other sources.

The Agriculture Immersion Program Director works as an independent contractor. Secured funding for their role is currently at $5,000 but we hope to increase that amount to $5,500 ($500 from SWCD). Materials, supplies, and food for participants is currently funded at $1,500, and those costs have increased due to inflation. We need to increase that amount to $2,000 ($500 from SWCD). Stipends for participants are currently funded at $5,000, but we hope to increase that amount to $6,000 ($1,000 from SWCD), which would provide a weekly stipend for 12 youth of $125 each for four weeks.

The Fozzie's Farm Internships are largely managed by the Community Programs Assistant, who works directly with the youth in the field and manages their schedules and timesheets. At this point we have only secured a portion of funding for that staff position, but we have submitted a grant application for the remainder of their full employment costs. We will be notified of the decision on that application on December 15, 2022. Without that funding, the direct supervision of the interns will fall to the Community Programs Director, whose salary and benefits are secured. We have currently secured $7,800 for the interns' wages, but with additional funding from SWCD we hope to add $3,000 to that amount to extend their work into August and September.

See the attached document, "Fozzie's Farm Summer Youth Program Budget."

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
Montezuma Land Conservancy (applicant)—Fozzie's Farm direct operational costs	$14,700 in-kind
Montezuma Inspire Coalition (GOCO)—secured program funding	$20,100 cash
Total Applicant Match (At Least 25%)	$14,700
Total Other Funding	$20,100
SWCD Request (Up to 50% of Project Cost)	$5,000
Total Project Cost	$39,800

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
See attached document, "Fozzie's Farm Summer Youth Program Budget"		
	Total Project Cost	$39,800
	Grant Administration Costs as a Percentage of Total Project Cost	11.6 %

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

None.

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

None.

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

N/A

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

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In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the

District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

_____ December 8, 2022

Signature Date

Printed Name Jay Loschert

As Authorized Representative for Montezuma Land Conservancy

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application:
Laura Spann, 970-247-1302, lauras@swwcd.org.

District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

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If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Jay Loschert

Signature

December 8, 2022
Date

Printed Name Jay Loschert

As Authorized Representative for Montezuma Land Conservancy

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Do not hesitate to contact staff with any questions as you develop your application:
Laura Spann, 970-247-1302, lauras@swwcd.org.

Fozzie's Farm Summer Youth Program Budget

Task/Materials Description	Funded by Entity and Amount	Request from SWCD	Total
Agriculture Immersion Program—materials, food, protective gear	Montezuma Inspire Coalition (MIC) $1,500	$500	$2,000
Agriculture Immersion Program—student stipends	MIC $5,000	$1,000	$6,000
Agriculture Immersion Program—director contract	MIC $5,000	$500	$5,500
Agriculture Immersion Program—transportation	MIC $800	$0	$800
Fozzie's Farm Internships—interns' wages	MIC $7,800	$3,000	$10,800
Fozzie's Farm indirect operational costs	Montezuma Land Conservancy $14,700	$0	$14,700
Total Project Cost	**$34,800**	**$5,000**	**$39,800**
Grant Administration Costs as a Percentage of Total Project Cost			**11.6%**

THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
✓	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
✓	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
✓	I have attached the applicant's financial statements to demonstrate adequate reserves.
✓	The financial request to SWCD does not exceed 50% of the total project cost.
✓	The applying organization is funding at least 25% of the total project cost.
✓	The request is for funds to be used in 2023, for a project to be completed in 2023.
✓	I understand that SWCD does not fund payroll, legal, or grant administration costs.
✓	I have included a detailed project expense budget.
✓	I have included a detailed project funding budget.
✓	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
✓	Feasibility and/or Engineering Studies
	Maps or Photos
✓	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal			
Type of Request	Grant x	Loan	Grant/Loan Package
Project Name	San Juan Mountains Snowtography Study		
Applicant	The Mountain Studies Institute		
Project Location (River Basin & County)	Animas/ San Juan and San Juan/ Archuleta		
Amount of Request	$20,000.00		
Total Project Cost	$181,510.00		
Applicant Match	$122,00.00		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
x	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding		

received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).

APPLICANT INFORMATION	
Name of Qualified Entity	Mountain Studies Institute
Type of Qualified Entity (See Guidelines)	NGO
Mailing Address	1315 Snowden St, Silverton, CO 81433
Federal ID Number	
Public Water System ID (if applicable)	
Contact Person	Dr. Jake Kurzweil
Position/Title	Associate Director of Water Programs / Hydrologist
Phone Number	415-302-9450
Email	Jake@mountainstudies.org

APPLICANT DESCRIPTION
Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment. Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.
The Mountain Studies Institute (MSI) is a non-profit that utilizes science people can use to empower mountain communities through research, monitoring, and education. Based in both Silverton, and Durango Colorado, MSI focuses on hydrology, watershed science, ecology, and education, serving the communities of the San Juan mountains for the past 20 years. MSI offers high-level technical skills and also provides strong facilitation services for collaboration processes. MSI has diverse in-house skill sets, including those of Dr. Jake Kurzweil, a PhD in Hydrologic Science, with a focus in ecohydrology and the nexus between forests and hydrology. MSI is partnering with the Center for Snow and Avalanche Studies (CSAS) for this project. CSAS will provide one of the field sites, along with established meteorological equipment, long running data sets, and expertise in snow science and hydrology. CSAS is a Silverton, CO based non-profit that serves the mountain science community and regional resource managers by hosting and conducting interdisciplinary mountain systems research and conducting year-round, twenty-four seven monitoring for weather, snowpack, radiation, dust-on-snow, soils, and hydrologic signals of regional climate trends. MSI wins, negotiates and manages diverse funding sources including federal, state, municipal and private monies. MSI also conducts fee for service contracts. MSI has been serving the San Juan Mountains for over 20 years and continues to grow its foundation of donors while also building a strong research portfolio to support our mission and surrounding communities.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measurable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

The 2022 Southwest basin implementation plan identifies the need to support and meet the needs of agriculture, municipal and industrial, recreational, and environmental water needs while reducing conflict and supporting healthy watersheds. As most of the water in the region available to these sectors comes from snow in our forested watersheds, resource managers are looking to the nexus of forestry and hydrology to address these issues.

Specifically, decreased water quantity and increased wildfire in the Southwest has led to conversations between resource managers and collaborative groups seeking to answer questions about how wildfire mitigation and forest structure influences snow accumulation, retention and subsequent water availability for humans and the environment. Current water availability is forecasted using SNOTEL and remote sensed data, which presents significant gaps in our understanding. SNOTEL sites are unrepresentative of complex forest structure and remote sensing has low temporal resolution and infrequently includes snow water equivalent, a key parameter to project water availability. To fill this knowledge gap and to address these questions, a snowtography partnership formed between the Mountain Studies Institute, United States Department of Agriculture, The Nature Conservancy, Dolores Watershed Resilient Forest Collaborative, Dolores Water Conservancy District, and Fort Lewis College. To date, this group has installed three snowtography sites in the San Juan Mountains. Snowtography is a simple, yet effective way to quantify the impacts of forest structure on water resources though the use of snow stakes, game cameras, and infrequent site visits. As this relationship is regionally variable, the goal is to create a strong network of sites across the San Juan's to arm resource managers with data that will help them plan management actions that create and maintain climate resilient forests and water supplies.

To better understand how forest structure impacts water yields in our headwaters, MSI and CSAS, in partnership with the above listed collaborators, are proposing to install two snowtography sites. The first would be in the Pagosa Springs area and will target a burned mixed-conifer forest, a disturbance and forest type underrepresented in our current network.

Data from this site will inform management on the greater San Juan watershed, and there is significant local support for the effort as the collaboratively developed San Juan Watershed Management Plan identifies snowtography as a strategy to implement in service to data gathering that informs planning and decision making. The second snowtography site will be close to Red Mountain Pass at CSAS's long term research site, Swamp Angel. Swamp Angel will be an excellent addition to the existing network because research here will help fill data gaps for high alpine ecosystems, long term meteorological data sets are available for the site and no additional meteorological equipment is needed, remote sensing data of snow water equivalent (SWE) exists from the Airborne Snow Observatory, and the availability of local staff reduces travel times to the monitoring site. Data collected from the Swamp Angel study site will inform management on the greater Animas Watershed.

Additionally, we are applying to the USDA National Needs Graduate Fellowship to support a master's student who will manage these two sites and complete a regional analysis across established sites in the Southwest to create a regional understanding of the impacts of management and forest structure on water supplies across landscapes and management practices. Establishing these two new snowtography sites and conducting a larger regional analysis directly supports SWCD's mission to protect, conserve, and develop water resources by quantifying how forest structure impacts water yields. This is exemplified by the projects ability to better inform resource managers about the most effective way to create climate resilient forests and water supplies.

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.
In late summer/early fall 2023, MSI and CSAS, with the assistance of collaborative partners, will install two snowtography sites. One site would be on Red Mountain Pass, at CSAS's long-term study plot and the other would be near Pagosa Springs. The installation is expected to occur over three days with four personnel and many volunteers apart of the larger collaborative network. The funding requested from SWCD will support the cost to fully purchase the equipment needed for the installation in Pagosa Springs and partially cover the Red Mountain Pass site. Following installation, the sites will be visited twice monthly during winter months (October-May). During visits, the graduate student or supporting partners will record snow water equivalent, download instrumentation, and maintain met station equipment as necessary. These costs will be covered by additional funding sources outlined in the budget. A larger goal of this project is to support a master's student at Northern Arizona University who will manage these sites for at least two years and produce a published article on the regional interaction of climate and forest structure and the way these dynamics influence water storage and availability. This student will start in August of 2023 and complete their degree in May 2025. Funding to support the student will come from the USDA National Needs Graduate Fellowship. Additionally, we hope to continue studies for long-term data collection and continue to partner with research institutions to produce peer-reviewed literature that can inform local and regional forest and water management decisions.

ENGINEERING AND LEGAL FEASIBILITY
Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.
No
Will the Project require state or federal regulatory permits of any type? If yes, please explain.
Yes, we will need permits to install snowtography structures. We currently have working permit agreements with the San Juan National Forest for our current snowtography sites and will be able to add to this existing agreement.
Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.
Payton, Elizabeth & Biederman, Joel & Robles, Marcos. (2021). Snowtography: Snowpack & Soil Moisture Monitoring Handbook. 10.25810/r9s7-4t28.

Dwivedi, Ravindra & Biederman, Joel & Broxton, Patrick & Lee, Kangsan & Van Leeuwen, Willem. (2022). Snowtography quantifies effects of forest cover on net water input to soil at sites with ephemeral or stable seasonal snowpack in Arizona, USA. Ecohydrology. 10.1002/eco.2494.

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

The $20,000 budget we are requesting from SWCD will fully cover the purchasing costs at the Pagosa Springs site and partially cover equipment costs at the Red Mountain Pass site. Equipment needed includes stakes, snow stakes, game cameras, SD cards, batteries soil moisture sensors, basic meteorological sensors (precipitation, wind, relative humidity, air temperature), data loggers, and miscellaneous parts (screws, nuts, bolts, poles and guide wires).

Additional funding for the remaining equipment costs has been committed by The Nature Conservancy. Additionally, this group is also applying to the Southwest Basin Round Table to fund the labor needed to install and maintain these sites. This includes three days at each site for installation, three days to determine the site in Pagosa Springs, as well as bi-monthly visits to collect snow water equivalent, download data, and maintain equipment. That application will be submitted December 16th and will be reviewed at the January 19th meeting.

Funding for a regional climatological analysis of all snowtography sites in the western United States, conducted by a master's student will be funded through the USDA's National Needs Foundation. That application will be submitted by December 16th and is assessed on a rolling basis.

There is one in-kind contributions for this proposal in the form of $15,000.00 from CSAS for their meteorological equipment already present at the site. This provides two major benefits, the first, is the level of accuracy and distribution of these instruments across the site which provide a higher level of accuracy as well as spatial distribution. The second is that the data records provide a long-term dataset that allows us to understand baseline conditions, something we have not been able to do at other sites.

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
National Needs Graduate Fellowship	$64,000.00 (Cash)
Dr. Salli Dymond	$15,000.00 (Cash)
The Nature Conservancy	$12,300.00 (Cash)
Pagosa Area Water & Sanitation District	$3,000.00 (Cash)
Town of Silverton	$2,500.00 (Cash)
San Juan Water Conservancy District	$1,000.00 (Cash)
Center For Snow and Avalanche Studies	$15,000.00 (in-kind)
Total Applicant Match (At Least 25%)	$112,800.00
Total Other Funding	$48,710.00
SWCD Request (Up to 50% of Project Cost)	$20,000.00
Total Project Cost	$181,510.00

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
Please see detailed budget		
	Total Project Cost	$181,510
	Grant Administration Costs as a Percentage of Total Project Cost	%1.22

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

Previous Awards for Forests to Faucets: My Water Comes from the San Juan Mountains			
Year	**Previous Award**	**Award Recipient**	**Project Title**
2020	$7,800	MSI	416 Fire Aquatic Monitoring Research Goup (requested)
2019	$6,000	MSI	416 Fire Aquatic Monitoring Research Goup
Awards prior to the implementation of the policy of receiving a maximum of $10,000 in 5 years			
2017	$14,840	MSI	Animas River Community Forum Year 2
2016	$17,000	MSI	Animas River Community Forum Year 1
2014	$1,800	MSI	Connecting for Conservation Conference Sponsorship

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the *Request for Release of Funds* form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Signature Jake Kurzweil Date 12/9/2022

Printed Name Dr. Jake Kurzweil

As Authorized Representative for Mountain Studies Institute

THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
X	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
X	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
X	I have attached the applicant's financial statements to demonstrate adequate reserves.
X	The financial request to SWCD does not exceed 50% of the total project cost.
X	The applying organization is funding at least 25% of the total project cost.
X	The request is for funds to be used in 2023, for a project to be completed in 2023.
X	I understand that SWCD does not fund payroll, legal, or grant administration costs.
X	I have included a detailed project expense budget.
X	I have included a detailed project funding budget.
X	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
	Feasibility and/or Engineering Studies
X	Maps or Photos
	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal	12/7/2022		
Type of Request	Grant X	Loan	Grant/Loan Package
Project Name	Dolores River Restoration Partnership: Restoration and Outreach		
Applicant	RiversEdge West on behalf of the Dolores River Restoration Partnership		
Project Location (River Basin & County)	Dolores River Basin – Montrose County		
Amount of Request	$19,386		
Total Project Cost	$39,062		
Applicant Match	$19,676		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
X	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding		

received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).

APPLICANT INFORMATION	
Name of Qualified Entity	RiversEdge West
Type of Qualified Entity (See Guidelines)	
Mailing Address	PO Box 1907, Grand Junction, CO 81502
Federal ID Number	27-0007315
Public Water System ID (if applicable)	
Contact Person	Montana Cohn
Position/Title	Restoration Coordinator
Phone Number	970-256-7400
Email	mcohn@riversedgewest.org

APPLICANT DESCRIPTION

Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment.

Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

RiversEdge West (REW) is a regional non-profit dedicated to the restoration of riparian lands in the West. REW advances riparian restoration through education, collaboration, and technical assistance. REW leads and supports many watershed partnerships in the West, focusing on the removal of invasive plants and regeneration of native species. REW spearheads multiple monitoring and data management efforts and organizes and leads education and volunteer opportunities.

REW is submitting this application on behalf of the Dolores River Restoration Partnership (DRRP). REW has been a leader of the DRRP since its inception in 2009, when it was formed to address the vast infestation of invasive tamarisk in the riparian corridor and to subsequently restore the riparian area for multiple purposes including improved wildlife habitat, recreational access, and agriculture. Since 2009, the DRRP has removed over 2000 acres of initial tamarisk, 2,600 acres of tamarisk resprouts, 3,767 acres of secondary weeds, and conducted 625 acres of active revegetation. Additionally, the DRRP works with stakeholders from private, state, and federal entities and acts as a platform to engage the community, work collaboratively on restoration and monitoring projects, and supports local economies.

REW has been working to restore western rivers for over 20 years and has significantly grown its budget and financial security in that time. Currently, REW raises and oversees an annual budget of $1.2M, retains a staff of ten, and has secured 6 months of operating expenses in reserve. REW undergoes a rigorous budgeting and fundraising planning process each year and has launched a capital campaign to fund the construction of an office and education center. REW is one of the main overseers of the DRRP budget and has been largely responsible for raising and spending funding for the work completed on the Dolores River in partnership with Southwest Conservation Corps.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measurable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

This proposed project area is located along the Dolores River from Bedrock past Mesa Creek through Montrose County. The goals of this project include habitat improvements for terrestrial and aquatic wildlife, public outreach and stewardship and overall watershed restoration.

This project requests funding for RiversEdge West staff to coordinate, manage, and participate in projects as well as administration and grant management. The funding outlined is specifically to be used for this project's management and does not represent a large portion of the REW employee's salary.

Task 1: Volunteer Stewardship Project

The DRRP strives to work with local community members annually to complete volunteer stewardship projects that benefit the riparian ecosystem of the Dolores River. In April of 2023, REW staff will organize and lead a revegetation project that will bring together volunteers and DRRP partners to plant 1 gallon container plants and hand broadcast seed of native and desirable plant species. The plants will be chosen with traits of drought resilience and forage benefits in mind.

The planting event will take place along the San Miguel River just upstream of the confluence with the Dolores River in the Uncompahgre Field Office. Included with this funding request will be a line item for travel to allow for follow-up watering and site visits to the area throughout the summer for REW employees and volunteers to ensure the best possible survival rate for the plants in the arid environment that is the Dolores River Basin.

This project aligns with SWCD's Strategic Plan through Strategic Priority 6: Cultivating SWCD's Credibility with the public through targeted outreach efforts. REW operates social media outlets and an email newsletter with a broad reaching network and will send out photos and recaps from the planting event, crediting SWCD with support for the project.

Task 2. Conservation Corps Strike Team Tamarisk Removal

REW will partner with Southwest Conservation Corps (SCC) to employ one of their 8-person saw crews who will work in the Uncompahgre field office between Bedrock and Mesa Creek and focus on the removal of tamarisk. SCC will deploy their restoration strike team to work

alongside or nearby this crew to efficiently complete this project. Although primary removal of tamarisk has been completed throughout most of the DRRP boundaries, there is a need for re-sprout treatments that have grown back large enough to require chainsaw removal. This work will be accomplished over the course of 3 crew weeks and cut stump methods will be used to remove the tamarisk and treat the stump with aquatic safe herbicide where necessary for potential regrowth.

The purpose and benefit of this resprout work is to remove tamarisk along the riparian corridor of the Dolores River, allowing for native plant recruitment, improved wildlife habitat, and overall improved watershed health. Since 2009 the DRRP has been employing conservation corps crews to work along the Dolores River, seeing successful treatments each year and paring down the remaining large stands of tamarisk.

This task aligns with SWCD's Strategic Plan through Strategic Priority 3: Balance meeting multiple water needs amongst a diverse set of priorities, especially when there is potential for conflict or mutual benefit. Specifically, this project supports the improvement of a healthy environment by ensuring quality habitat for terrestrial and aquatic wildlife, including native fish. This task also benefits the recreation economy as the Dolores River supports a seasonal but cherished stretch of river for rafters, as well as improving recreational access and overall aesthetic benefit.

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.

This project will be completed by December 14, 2023. Task 1 takes place in April of 2023 and will continue to be watered and maintained through September of 2023. Task 2 will take place in September or October of 2023.

ENGINEERING AND LEGAL FEASIBILITY

Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.

No.

Will the Project require state or federal regulatory permits of any type? If yes, please explain.

No.

Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.

None applicable.

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the

basis for in-kind valuations.

Project Budget - Dolores River Restoration and Outreach

Expense	Rate	Units	Total	SWCD Portion	Matching Portion	Matching Source
REW Restoration Coordinator	$38.89	200	$7,778	$5,200	$2,578	DRRP BLM AA
SCC Watershed Program Manager	$32	40	$1,280		$1,280	SCC in-kind
BLM Ecologist	$50.00	60	$3,000		$3,000	BLM in-kind
REW Education and Outreach Coordinator	$47.74	14	$668	$0	$668	REW in-kind
Travel Per Diem	$69.00	3	$207	$207	$0	
Travel Mileage	$0.63	1750	$1,094	1094		
SCC Strike Team	$5,500.00	2	$11,000		$11,000	SCC Restore
SCC Saw Crew	$10,500	1	$10,500	$10,500	$0	
Native Grass Seed	$750	1	$750	$375	$375	SCC CWCB
Plant Materials	$25	75	$1,875	$1,100	$775	SCC Restore
Planting Supplies(caging, t-posts, wire)	$700	1	$700	700	$0	
Volunteer Food	$15	14	$210	210	$0	
Total			**$39,062**	**$19,386**	**$19,676**	

- DRRP Bureau of Land Management Assistance Agreement: Secured (9/2020-9/2025)
- Southwest Conservation Corps (SCC) Colorado Water Conservation Board (CWCB) Watershed Restoration Grant: Secured (9/1/2022-12/31/2024)
- Southwest Conservation Corps National Fish and Wildlife Foundation (NFWF) Restore Grant: Secured 1/02/2021-12/31/2023
- Matching funding from SCC and BLM is on behalf of the DRRP to achieve match for 50% of the overall budget and 25% coming from the applying organization.

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
REW – BLM DRRP Assistance Agreement	$2,578 - cash
BLM Ecologist	$3,000 - in-kind

SCC Watershed Program Manager	$1,280 - in-kind
SCC CWCB	$375 - cash
SCC Restore	$11,775 - cash
REW Education and Outreach Coordinator	$668
Total Applicant Match (At Least 25%)	$19,676
Total Other Funding	$
SWCD Request (Up to 50% of Project Cost)	$19,386
Total Project Cost	**$39,062**

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Please see above table under Water Activity Budget for a detailed breakdown of the budget.

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

RiversEdge West was awarded $16,500 in 2022 for 2022 Dolores River Restoration Partnership - Stewardship and Monitoring

Southwest Conservation Corps has been a fiscal agent for SWCD funding for the DRRP in the past.

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

N/A

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

N/A

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the *Request for Release of Funds* form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Montana Cohn

Signature _____ 12/7/2022
Date

Printed Name Montana Cohn

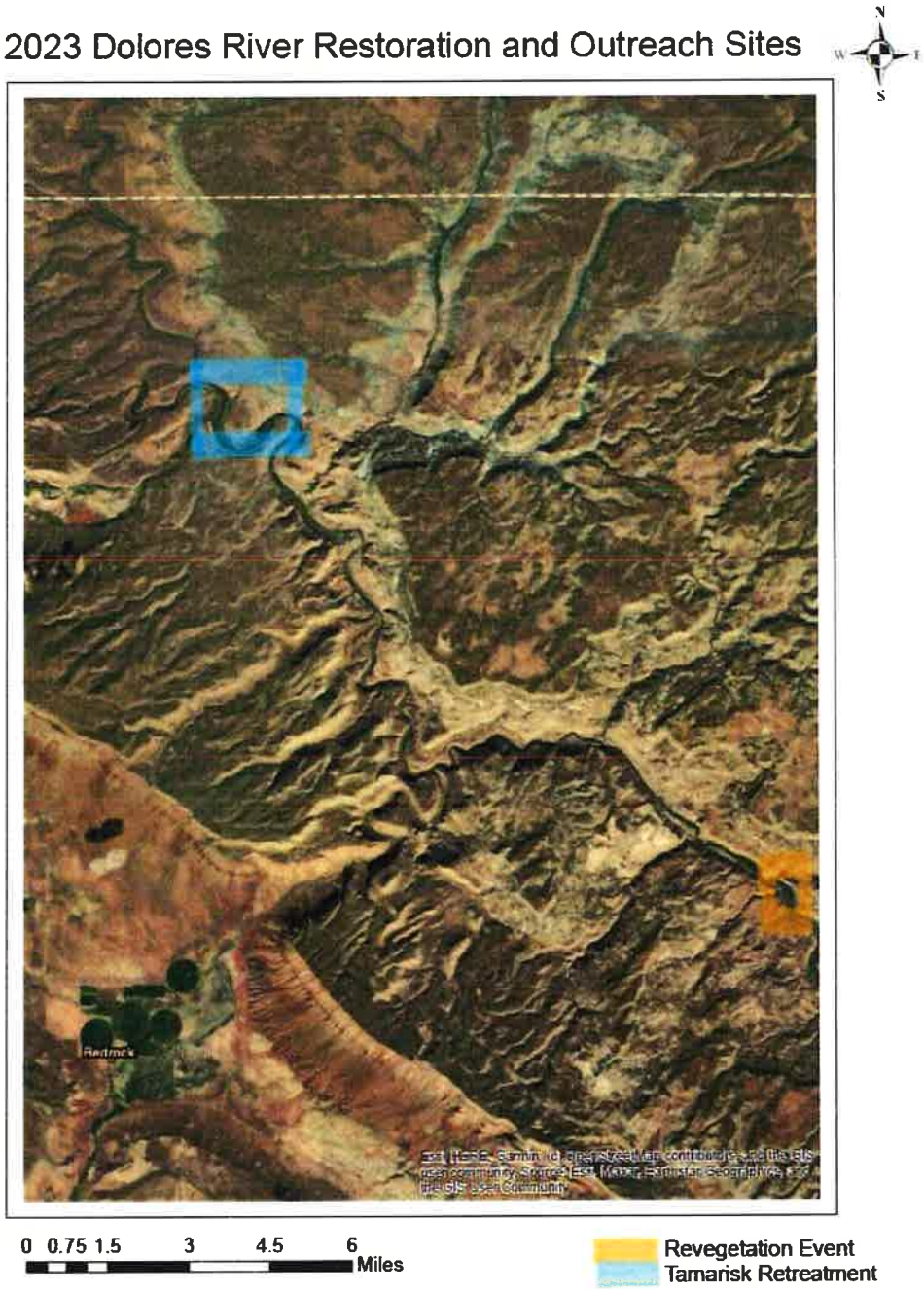
As Authorized Representative for RiversEdge West

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application.

Laura Spann, 970-247-1302, lauras@swwcd.org.

Attachment A: Maps



THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
x	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
x	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
x	I have attached the applicant's financial statements to demonstrate adequate reserves.
x	The financial request to SWCD does not exceed 50% of the total project cost.
x	The applying organization is funding at least 25% of the total project cost.[1]
x	The request is for funds to be used in 2023, for a project to be completed in 2023.
x	I understand that SWCD does not fund payroll, legal, or grant administration costs.
x	I have included a detailed project expense budget.
x	I have included a detailed project funding budget.
x	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
x	Feasibility and/or Engineering Studies
x	Maps or Photos
x	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal	December 8, 2022		
Type of Request	Grant X	Loan	Grant/Loan Package
Project Name	Pagosa Gateway Project		
Applicant	Trout Unlimited on behalf of the Upper San Juan Watershed Enhancement Partnership (WEP)		
Project Location (River Basin & County)	Upper San Juan Basin - Archuleta		
Amount of Request	$17,000		
Total Project Cost	$220,000 design, engineering, permitting ($1,198,770 w/construction)		
Applicant Match	$203,000		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
x	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs

[1] Trout Unlimited is applying as fiscal agent/on behalf of WEP. WEP funds exceed 25% of the total cost of design, engineering and permitting for which SWCD funds are being sought.

	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events

Note: The amount of funding each applicant may receive is further limited by the funding received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).

APPLICANT INFORMATION	
Name of Qualified Entity	Trout Unlimited
Type of Qualified Entity (See Guidelines)	Non-profit organization (NGO)
Mailing Address	P.O. Box 1544, Pagosa Springs, CO 81147
Federal ID Number	38-1612715
Public Water System ID (if applicable)	NA
Contact Person	Mely Whiting
Position/Title	Colorado Water Project Legal Counsel
Phone Number	720-470-4758
Email	mely.whiting@tu.org

APPLICANT DESCRIPTION

Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment.

Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

Trout Unlimited, Inc. (TU) is a 501(c)(3) non-profit organization founded in 1959. TU's mission is to bring together diverse interests to care for and recover rivers and streams so our children can experience the joy of wild and native trout and salmon. TU works to achieve this mission at a local, state, and national level through an extensive volunteer network and dedicated staff. TU has a strong local presence in Southwest Colorado, including activities by its Five Rivers Chapter and active staff involved in a wide variety of water-related local and regional activities.

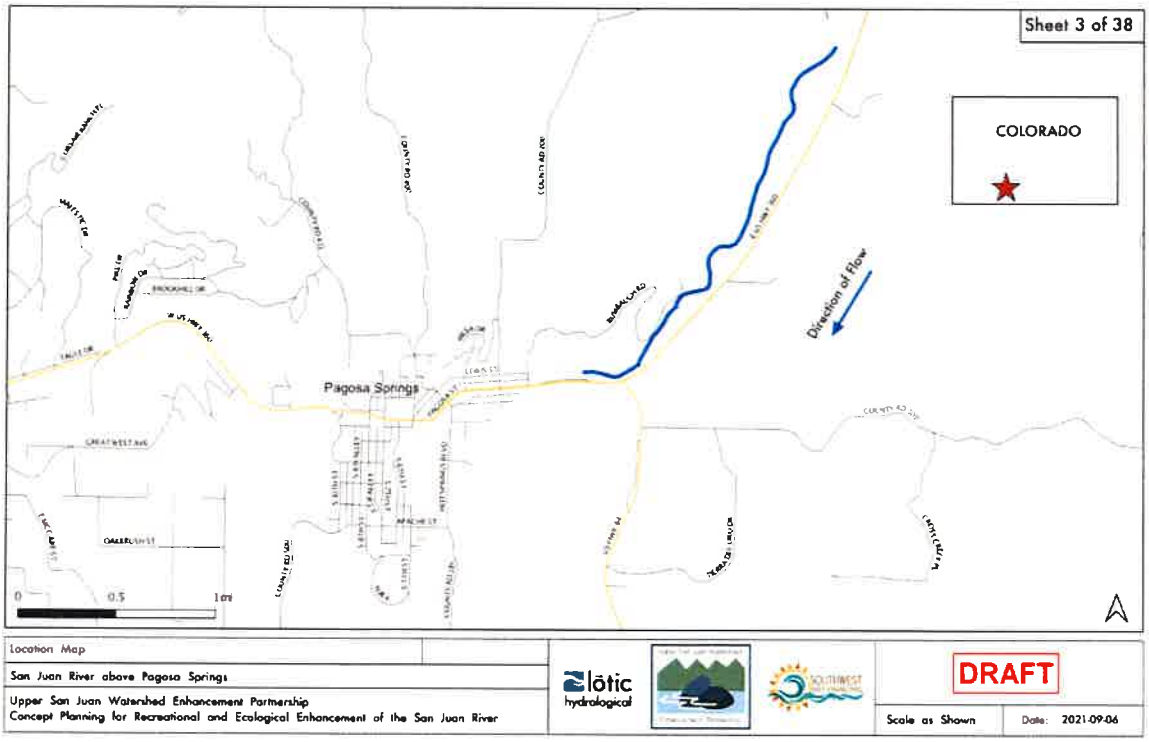
TU is applying for this grant on behalf of and as fiscal agent for the Upper San Juan Watershed Enhancement Partnership (WEP), a Pagosa-based stakeholder group working on on-the-ground projects for the benefit of multiple water uses in the upper San Juan River.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measureable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

The Pagosa Gateway Project proposes to improve approximately 2.1 miles of the San Juan River immediately upstream of the Town of Pagosa Springs to preserve aquatic habitat and recreation in the face of declining flows and warming temperatures.



The San Juan River is home to native and recreational fisheries. River recreation, including sport fishing, is a significant economic driver in this rural community. A recent environmental and recreational water supply needs assessment commissioned by WEP identifies alarming changes in stream hydrology driven by prolonged drought. (Lotic 2021). For example, year-over-year reductions in summertime stream flow volumes within the project area are decreasing at an average rate of 700 acre-feet per year. The study concludes that late summer and fall flows may be restricting the availability and quality of aquatic habitat for fish and other aquatic species. Conditions are expected to get significantly worse, based on state scenario planning models

which indicate significant reduction in magnitude and frequency of peak flows, further reductions in late summer and fall flows, and increase in stream temperature in the area. (Lotic 2021). The Pagosa Gateway Project will implement a series of measures, including creation of low flow channels, riffle and pool habitat, bank stabilization and revegetation, fish passage, and similar measures to increase the resiliency of the San Juan River and its fisheries in the face of a very dry and hot future.

The project consists of the construction of a series of measures or "interventions" designed to address the negative impacts of decreasing stream flows on aquatic habitat and to improve the river's resilience in the face of climate change. The types of interventions proposed include:

Low Flow Channel Shaping

Two types of low flow channel intervention are envisioned.

• High-priority low-flow channel shaping is indicated in areas where the current structure of the stream bed does not include any area of consolidated flow during low flow periods. The focus in these areas will be on structural modification of the stream bed to provide a lower elevation surface across some portion of the cross-sectional profile. High priority low-flow channel shaping is also called out in areas where the existing low-flow channel appears to provide critical habitat. The focus in these areas is on protecting existing channel forms and behavior.

• Opportunistic low-flow channel shaping is indicated in all areas that are not high-priority areas. In these sections of river channel, efforts will focus on moving material (possibly single boulders or small clusters of cobble) in a manner that promotes consolidation of flow in the existing channel thalweg during late summer and fall periods. This work will be performed where and when it is convenient and not at the expense of other aspects of the full effort.

Grade Control Structures

Placement of a channel spanning structure across the riverbed is proposed at several locations. The main goal of these structures is the promotion and maintenance of low flow channels at

certain positions in the channel bed. In other locations, partially buried rock ribs extending outward from the inside of the river bend intend to hold grade on existing alluvial surfaces and drive consolidation of late-summer and fall low flows into a narrower section of the channel bed. These structures often alternate with flow deflectors positioned on the opposite stream bank. These deflectors are intended to prevent organization of water velocity fields during periods of high and moderate flow and protect infrastructure or streambanks subjected to debris removal.

Riparian Plantings

Several areas along the river corridor are proposed for riparian revegetation. The extent of some of these areas suggests that an extensive planting plan and, perhaps, multi-season irrigation of the area, is required to maximize benefits of the intervention. At this time, the extent of riparian revegetation efforts is expected to be limited to the near stream area. Planting plans for these areas are expected to rely heavily on willow cuttings from on-site and from nearby stream reaches.

Placement of Habitat Structures

Low baseflow conditions result in shallow water depths and reduction in habitat quality for aquatic species in many locations. Synergistic effects between flow alteration and near-complete removal of streamside vegetation in several locations and the presence of relatively uniform bedrock bed surfaces in others further constrains habitat quality and results in reductions in stream network connectivity during some portion of the year. Placement of habitat structures in the stream channel and along the streambanks intends to increase bed complexity, encourage the formation of small scour pools and provide an opportunity for aquatic organisms to transit through a reach by "hop-scotching" between preferred habitats. The habitat structures envisioned by this project area constructed from large rock and/or toe wood.

Streambank Work

Cars were historically buried in levee features and along the outside bend of some streambanks to stabilize the bank. Recent channel changes have led to the exposure of these cars and other materials. Proposed work will re-stabilize the embankments to protect stream-side infrastructure and reduce risk to people using the river.

A conceptual level design for the project has been completed and is available for review. By implementing these measures, the Pagosa Gateway Project will increase water supply reliability for ecosystems along the San Juan River above Pagosa Springs. This increase in reliability will not be achieved by altering management of water but, rather, by modifying the channel to be more resilient in the face of historical flow alterations and expected future changes to low-flow conditions.

The Pagosa Gateway Project, together with its companion Yamaguchi South Project, which will implement similar improvements downstream of downtown Pagosa Springs, are needed not only for the ecological benefits they provide. They are needed to support the local economy. Outdoor recreation is a mainstay of Pagosa Springs' economy. According to the Region 9 Economic Snapshot-2020 Update, tourism is one of the top employment industries in Archuleta County and largely based on the area's spectacular natural resources. The San Juan River forms the "foundational infrastructure" for local recreational and economic interests. Riverine based tourism activities (boating, fishing, trails, bird watching, etc.) are some of the most utilized of those interests. A decline in aquatic habitat and fisheries impacts fishing. Projects designed to improve aquatic habitat in the face of lower flows and higher stream temperature benefit the local economy.

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.

WEP has been able to secure $375,000 funding from the US Bureau of Reclamation and Southwest Basin Roundtable approval of $100,000 plus a recommendation for CWCB approval of an additional $675,000 from the Water Supply Reserve Funds grant program. WEP has also secured match funding from all but Archuleta County, which will be considering in January 2024. All funding is contingent on our ability to obtain the entirety of funds, including SWCD matching funds.

With the strong backing of the basin roundtable, we anticipate CWCB approval of funding for the project in March of 2023 and publication of an RFP for design-build of the work in May 2023. Design, engineering, and permitting for the project would begin soon thereafter, with final design and engineering expected before the end of 2023. Construction would take place as soon as runoff allows in 2024.

SWCD funds, if granted, will be used toward design, engineering and permitting of the project, which will be completed in 2023.

ENGINEERING AND LEGAL FEASIBILITY

Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain. No.

Will the Project require state or federal regulatory permits of any type? If yes, please explain. Yes, the project will require a general USACE 404 permit.

Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project. A conceptual design for the project has been completed and can be found at

https://drive.google.com/file/d/1GaNywvHB6LuD1co2n9xiXyEhCGWeL0L3/view?usp=drive_web

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

SWCD funds are requested to go toward design, engineering and permitting for the project, estimated at $225,000. The total cost of the project is estimated at $1,198,770.

Final approval of the funding request to the CWCB is expected at their March 2023 meeting.

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
CWCB (WSRF)	$134,200
Total Applicant Match (At Least 25%)	$68,800[2]
Total Other Funding	$134,200
SWCD Request (Up to 50% of Project Cost)	$17,000
Total Project Cost	**$220,000**

[2] Includes match from other WEP members.

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

A detailed budget for the conceptual design is attached to this Application.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
	Total Project Cost	$
	Grant Administration Costs as a Percentage of Total Project Cost	%

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

SWCD has awarded a total of $31,103 to TU over the last 5 years under the Public Processes and Studies category.

$13,945 02/22/2018 Upper San Juan Stream Management Plan Phase I
$17,158 03/09/2020 Upper San Juan Integrated Water Management Plan Phase II

SWCD has provided no funding to TU for Water-Related Projects in the last 5 years.

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

Trout Unlimited's Audited 2021 Financial Statement is attached.

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD

should financial assistance be offered in the form of a loan.

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the *Request for Release of Funds* form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Amelia S. Whiting

Signature

12/8/2022
Date

Printed Name Amelia Whiting

As Authorized Representative for Trout Unlimited

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application:
Laura Spann, 970-247-1302, lauras@swwcd.org.

THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
AB	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
AB	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
AB	I have attached the applicant's financial statements to demonstrate adequate reserves.
AB	The financial request to SWCD does not exceed 50% of the total project cost.
AB	The applying organization is funding at least 25% of the total project cost.
AB	The request is for funds to be used in 2023, for a project to be completed in 2023.
AB	I understand that SWCD does not fund payroll, legal, or grant administration costs.
AB	I have included a detailed project expense budget.
AB	I have included a detailed project funding budget.
AB	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
	Feasibility and/or Engineering Studies
AB	Maps or Photos
AB	Letters of Support **Letters of Support included were written for SMWC's Colorado Water Plan Grant Application**

WATER ACTIVITY SUMMARY	
Date of Submittal	12/09/2022

Type of Request	Grant X	Loan	Grant/Loan Package
Project Name	Development of a Hydrological Model of the San Miguel Watershed		
Applicant	San Miguel Watershed Coalition (SMWC)		
Project Location (River Basin & County)	San Miguel Basin, San Miguel and Montrose Counties		
Amount of Request	$20,000		
Total Project Cost	100,000		
Applicant Match	80,000		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
X	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).		

APPLICANT INFORMATION	
Name of Qualified Entity	San Miguel Watershed Coalition
Type of Qualified Entity (See Guidelines)	501(c)(3) Nonprofit
Mailing Address	PO Box 1601, Telluride, CO 81435
Federal ID Number	84-1500508
Public Water System ID (if applicable)	
Contact Person	Adrian Bergere
Position/Title	Executive Director

Phone Number	(518) 817-1607
Email	adrian@sanmiguelwatershed.org

APPLICANT DESCRIPTION
Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment. Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

The SMWC is a nonprofit watershed group that works to maintain and improve the ecological health of all 80 miles of the free-flowing San Miguel River and its tributaries. We conduct and facilitate river projects, provide community education opportunities, and conduct water quality testing. SMWC engages stakeholders from throughout the 1,550 square mile watershed—from the western San Juan Mountains to the slick rock canyons of the West End—to participate in collaborative efforts that promote our river's health and the economic vitality of our watershed's communities. Our mission is to promote environmental health and sustainability of the watershed by giving the communities and stakeholders in the watershed a voice to direct the future management of watershed resources.

The SMWC proactively plans for the organization's future by engaging stakeholders to understand the needs of the watershed, and positioning itself to address those needs through its programming. Over the course of SMWC's 25 year history, these programs have included: environmental mitigation of water diversion structures; wetland and riparian restoration; river restoration studies; sediment and water quality studies; river cleanups; conservation easements; forest health and wildfire studies and stakeholder facilitation; numerous studies related to specific watershed issues; and development of a Stream Management Plan for the San Miguel Basin. In addition to developing programming to meet future needs of the watershed, SMWC engages in programs related to the continuous needs and understanding of the watershed, namely annual water quality monitoring an annual Watershed Forum and publishing an all-encompassing watershed report every five years, the State of the San Miguel Watershed Report. The SMWC hosts educational events and disseminates information related to all of these programs.

By engaging in these programs driven by stakeholder input of the San Miguel Basin community, SMWC is able to secure funding from local town governments (Town of Telluride, Mountain Village, Norwood, Nucla, Naturita, Ophir, counties (San Miguel, Montrose), the State of Colorado (CWCB, CPW, DRMS, CDPHE, SWCD, SWBRT), and federal agencies (USFS, BLM, BOR) and other NGO's. The SMWC also has a growing donor base as it expands programming, bolsters marketing and the general community becomes more aware of water issues in the Colorado River Basin.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measurable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

The San Miguel watershed in southwestern Colorado is home to abundant forests, steep mountains, world-class outdoor recreation opportunities, and towns with a long history of ranching, logging, and gold, silver, and uranium mining. The vegetation type and cover, precipitation, and geomorphologic characteristics vary markedly from the headwaters to its confluence with the Dolores River. Despite its relatively low population, the watershed's water quantity and quality are and will be impacted by changing residential and commercial development, historic mining, agriculture, and climate change. Preliminary evaluations conducted in the 2021 San Miguel River Non-consumptive Needs Assessment report show that ecosystem services have not been at risk in the past, but changing climate increases the susceptibility to hydrologic challenges in the future. To ensure that the watershed is resilient to climate change, the community and its stakeholders have identified a need for advanced numerical tools to inform conservation and drought contingency plans. Specifically, the community has identified the need to quantify impacts to the complete hydrologic system due to changing climate, land use, and water management, and to evaluate the most effective conservation and management strategies that will ensure a resilient ecosystem and water supply in the future. Additionally, the community stressed the need for a tool that is capable of integrating dynamic weather inputs, modeling complex subsurface hydrogeologic conditions, evaluating the effects of changing land use/cover, and creating effective drought management and conservation planning.

As identified by the Southwest Basin Implementation Plan (SWBIP) and the Environmental and Recreational Needs Assessment of the San Miguel watershed, the San Miguel mainstem and tributary flows are susceptible to significant decreases in water availability, impacting agricultural, municipal, industrial, and recreational water needs. To meet these declines in water supply, SMWC and its stakeholders have identified a need to implement conservation management actions that create climate and drought resilient water supplies.

To inform decisions around which conservation management actions to prioritize, SMWC proposes to develop an integrated hydrologic/hydraulic tool that can be used to quantify changes in water availability under a changing climate, simulate the hydrologic response to wildfire and wildfire mitigation, evaluate the effectiveness of conservation efforts, and simulate other water management actions.

Both the Colorado Water Plan and the Southwest Basin Implementation Plan (SWBIP) note, the San Miguel watershed leans heavily on its robust agricultural communities and currently lacks water storage capacity compared to other subbasins. The Southwest region of Colorado has a pressing need to develop tools, measures, and actions that will assist with water conservation and drought planning while ensuring a viable economy and an intact ecosystem. Southwest Colorado has recently experienced first-hand the negative impacts of drought on the economic wellbeing of its communities. This last year, many major river systems in the area saw the lowest flows on record, and the U.S. Drought Monitor listed the region as being in exceptional drought -- the highest category possible. As a result of the drought, ranchers and farmers needed to sell large parts of their herds and grow more drought-resistant crops. In addition to the lack of storage, the SWBIP also illustrates that the gap between water need and water availability for agricultural communities in the San Miguel basin is expected to grow with the current trend of decreased precipitation. Communities of the San Miguel watershed want to protect water resources across all sectors (agriculture, recreation, environment, municipal, industry). It is imperative to conserve

water across the sectors to preserve the economic and environmental wellbeing of the basin and strive to meet Instream Flow appropriations. Understanding and supplying the needs of multiple users is very difficult, as environmental and recreational water supply needs were not quantified at the same level as agriculture before the Environmental and Recreational Needs Assessment (Lotic Hydrological, 2021).

The need for a robust tool to address water conservation and drought planning has also been identified by The San Miguel Partnership (the Partnership) which was a Southwest Basin Roundtable (SWBRT) subcommittee created to develop an E&R Needs Assessment in the San Miguel Watershed. The goal of the Partnership was to quantify E&R needs and identify top priority, multi-benefit projects in the watershed. The need for quantification and increased stakeholder input at the watershed scale was identified by the 2010 E&R needs assessment as part of the Statewide Water Supply Initiative (SWSI), the 2015 Colorado Water Plan, and the 2015 SWBIP. The Partnership's E&R Needs Assessment (Lotic Hydrological, 2021) is a comprehensive technical document created to understand gaps in water quantity data in the San Miguel watershed. The Needs Assessment quantified basic surface water needs based on future climate and growth alternatives without quantifying groundwater's role in the system. SMWC proposes to build and calibrate a more robust, powerful tool to be housed internally, for use in advancing the Partnership and SMWC projects that require more comprehensive modeling of water availability, climate, and hazards. The Partnership specifically mentions Integrated Hydrological Modeling of the San Miguel Watershed as a project to be moved toward the SWBRT IPP list with the specific goal of supporting a number of other identified projects on the list including:

- Wrights Mesa Drought Contingency Planning
- Streamflow Gauge Network Support
- Real-time Water Temperature Monitoring Program
- CC-Highline Ditch Infrastructure Improvements
- Floodplain Restoration Opportunity Inventory
- Invasive Riparian Vegetation Control
- Investigate Creative Water Use Agreements to Protect Fish

Although the recent Environmental and Recreational Needs Assessment report by Lotic Hydrological (2021) found the San Miguel watershed to be currently functioning well, they noted that it is at serious risk of hydrologic depletion due to climate change. Lotic noted that baseflows and overall groundwater contributions to the San Miguel River are not understood or quantified by current models. Existing tools do not provide the groundwater and climate-driven surface water dynamics needed. Additionally, the Colorado Water Plan and SWBIP identified the need for an integrated understanding of ecohydrologic interactions and watershed resilience to climate change as a "cross-sector challenge" . These issues and others identified by community members and stakeholders in the basin point to a clear need to develop advanced tools that are accessible to the community to quantify current and projected water availability and demands. Having an accessible, living hydrologic tool will allow stakeholders and resource managers to evaluate innovative conservation solutions to ensure that the basin is using the most effective measures to become climate resilient.

Through the development of a fully integrated groundwater-surface water modeling tool, the water availability throughout the basin will be understood at a high temporal and spatial

resolution under varying climatic scenarios. The first step toward an effective conservation and drought contingency plan is understanding how the system will respond to varying levels of drought. Such an understanding directly supports identified community needs by quantifying water availability under projected future climate conditions and allowing for testing of innovative conservation strategies across sectors, innovative ways to expand storage, and more efficient ways to transport and maintain water in the system. A tool as capable as MIKESHE, housed locally by a non-profit, will allow stakeholders to evaluate the viability of proposed solutions to balance the demands among agriculture, municipal, industrial, and environmental sectors that will allow the community to plan for current and future demands.

In addition to understanding water availability under a changing climate, the community identified, as part of the River Restoration study, a clear need to quantify the hydrologic response to wildfire and wildfire mitigation (San Miguel Watershed Coalition, 2022). As part of the proposed study, SMWC plans to create and run a high-resolution model of the Beaver Creek sub-watershed to evaluate the potential impacts of wildfire and wildfire mitigation. The result of the sub-watershed model will help quantify the hydrologic impacts of wildfire mitigation and allow the community to select adaptive and climate resilient management strategies.

SMWC intends this tool be accessible to stakeholders while ensuring that a skilled labor force will be available to use it in the future. To achieve this goal, SMWC will be partnering with Colorado School of Mines to train a graduate student intern on model. Additionally, SMWC in partnership with Colorado-based universities, will host a local and remotely available workshop on integrated hydrologic modeling and the results of our study. The goals of the workshop will be to showcase our results, share knowledge and experience, and inspire and recruit future water resource managers. These goals aim to build the labor pool while helping create a water-fluent public.

The MIKESHE code was selected for multiple reasons to address conservation and drought planning needs. Currently, no existing tools or hydrologic models have been developed that are capable of evaluating the broad range of local- to regional-scale water resource issues in the San Miguel River watershed at an appropriate level of surface and subsurface detail and with physical processes. Although a StateMod model has already been created for the watershed, MIKESHE is a much different type of code, but the respective models are considered complementary and can support each other.

MIKESHE is able to simulate complex subsurface flows, storage, and stream-aquifer dynamics (especially groundwater baseflows) that are essential for predicting how physically realistic future changes in land use and climate will impact the system. Importantly, MIKESHE is driven by external, distributed, event-level (hourly) weather inputs (air temperature, precipitation, reference evapotranspiration), which permits evaluation of changes to important simulated hydrologic variables (i.e., groundwater heads, seep/spring discharge, snowpack/snowmelt, stream stage/flow) due to, for example, the changing climate.

To help determine the feasibility of constructing a functional fully integrated model for the San Miguel watershed, we obtained some essential datasets (i.e. topography, surficial geology, surface flow gage data, groundwater wells, and drainage network) and constructed a preliminary model

framework as shown on Map 3 in the attached maps. We believe an adequate dataset exists to construct and calibrate the model.

Evaluating alternative conservation or land use mitigation strategies, especially at a local scale, is challenging without first developing a capable tool. MIKESHE is a robust and versatile tool that can be easily run and modified to answer a multitude of questions. The tool is able to simulate a wide range of managed crop types, crop rotations, irrigation diversions, and water irrigation strategies that will allow users to quantify land use impacts on water availability. It simulates a broad range of hydraulic structures and urbanization, which permits users to evaluate innovative conservation approaches and designs and associated risks to infrastructure and the ecosystem. It is capable of simulating the fate and transport of pollutants in streams and aquifer systems, allowing the user to understand how to best mitigate the long-term impacts of mining and other pollutant inputs. MIKESHE uses rigorous, physically based solutions that are essential for correctly simulating and evaluating engineering designs, operations, and impacts (i.e., dams, diversions, culverts, gates etc.). A key feature of the MIKESHE and MIKEHydro codes is their graphical user interface (GUI), which facilitates faster model development, and, importantly, accessible visualization of inputs and outputs that allows functional use by non-experts. In other words, once the model is built, SMWC and/or stakeholders can visualize and run simulations with different inputs.

The community has identified the importance of developing the MIKESHE tool to pursue stakeholder-identified projects and understand long-term water availability due to its extensive capabilities, accessibility, and its ability to simulate a large number of environmental scenarios. The level of interest is apparent by the list of projects requested to be run after initial development of the tool. Requested future projects included (San Miguel Partnership, 2022; San Miguel Watershed Coalition, 2022):

- Wrights Mesa Drought Contingency Planning
- Streamflow Gauge Network Support
- Real-time Water Temperature Monitoring Program
- CC-Highline Ditch Infrastructure Improvements
- Floodplain Restoration Opportunity Inventory
- Invasive Riparian Vegetation Control
- Investigate Creative Water Use Agreements to Protect Fish
- Post-fire hazard planning and mitigation along the San Miguel and its tributaries and the HWY 145 corridor.

Finally, MIKEHydro (a complementary tool to MIKESHE) is a FEMA-approved package for riverine floodplain delineation. Although not a part of this work, the MIKESHE tool we are proposing to build here could in the future be combined with more detailed channel and valley cross section measurements to build a foundation for improved Fluvial Hazard Zone delineations. Specifically, both scenarios our team will run -- impact of climate change on baseflow and water

availability, and the hydrologic response to wildfire and wildfire mitigation – could be used to generate inundation maps that are representative of future hydrologic conditions.

A compilation of the references cited in the proposal is presented as Appendix A.

The SMWC has been approved to receive funding for this project from a CWCB Water Plan Grant. The full application can be found here: https://dnrweblink.state.co.us/CWCB/0/edoc/217474/San%20Miguel%20Watershed%20Coalition%20-%20Integrated%20Hydrological%20Modeling%20of%20San%20Miguel%20Watershed_Application.pdf

The full project, funded by the water water plan grant is taking place over two years and divided into three tasks:

Task 1. Develop a robust, physically based, fully integrated hydrologic model of the entire San Miguel watershed hydrologic system. Calibrate the model to available data and run simulations to evaluate model sensitivity to calibration inputs, including changes in recent land use designations.

Task 2. Simulate scenarios to evaluate the sensitivity of system flows, water balance, and water storage to future climate change conditions. Using a local-scale, high-resolution model, evaluate the hydrologic impact of wildfire and wildfire mitigation in the Beaver Creek sub-watershed.

Task 3. Conduct public outreach via training a graduate student from a Colorado university on the use and capabilities of the model, presenting the results of the project to local stakeholders, and conducting a week-long integrated hydrologic modeling workshop aimed at training local and regional stakeholders in integrated modeling.

The SMWC is requesting project funding from the SWCD only to support Task 1, which will begin in January 2023 and conclude in December 2023.

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.

Model Development/Calibration:

Before evaluating where water conservation strategies might best be applied within the complex surface-subsurface San Miguel River hydrologic system, detailed information on the surface and subsurface flow system, and all inflows, outflows, internal storage dynamics, must be characterized, quantified and understood at an appropriate level. Existing watershed models of the system do not provide this level of detail. For example, groundwater baseflow and interaction with surface flows are not included in existing models, yet these elements are critical to designing conservation mitigation measures that will effectively address the depletion of regional groundwater supplies resulting from extended droughts and climate change.

The goal of this task is to create and calibrate an integrated surface water-groundwater model of the entire San Miguel watershed. The SMWC and stakeholders propose using the climate-driven, hydrologic/hydraulic software code MIKESHE, offered by the Danish Hydrologic Institute (DHI), to construct the fully integrated model. This modeling tool simulates a wide range of hydrologic problems and provides detailed outputs for all system hydrologic processes, including wetlands/channel flows, soil moisture, complex aquifer flows, and discharge to streams, wetlands, and springs. The tool can simulate river diversions and irrigation applications, complex hydraulic structures and operations, evapotranspiration, dust-on-snow events, and integrated water quality (i.e. stream temperatures, sediment, and metal concentrations).

The model will build on the 2021 Environmental and Recreational Needs Assessment conducted by Lotic Hydrological using the Colorado Water Conservation Board simulation model StateMod. MIKESHE will improve simulation of stream-aquifer flows, particularly groundwater baseflow contributions to surface flows. It will also explicitly incorporate a subsurface aquifer framework, based on available data and conceptualization, that will govern losing and gaining river reaches and ditches and the impacts of all specified groundwater pumping. Calculating dynamic and distributed groundwater-aquifer flows in detail -- and modeling how these are affected by irrigation, pumping, and changing land use and climate -- are critical to supporting conservation and land use planning efforts.

Method/Procedure:

Data Collection/Database. The first step is to compile all available spatial/temporal surface and subsurface hydrologic and hydrogeologic datasets into a comprehensive Geographical Information System (GIS) project database that will be managed by SMWC. This dataset will be made available for public download. Example datasets are summarized in Table 1.

Table 1. Environmental datasets and sources used to create the baseline San Miguel watershed model.

Dataset	Source

Topography	10m Digital Elevation Model.
Surface hydrologic drainage network	Already defined in MIKEHydro using 60-m data.
Soils	USDA-SSURGO or other appropriate dataset for the area
Vegetation distribution	National Land Classifications/Landfire datasets
Spatially distributed, sub-daily (hourly) Climate Data	Precipitation, Air Temperature and Reference ET will be obtained from NASA's National Land Data Acquisition System (NLDAS).
Leaf Area Index	MODIS satellite LAI 4-, or 8-day Average, 1 km spacing and major Veg Types

Surface and subsurface geology and hydrogeologic properties	Surficial Geologic maps (USGS and Colorado Geological Survey), well locations, completions, aquifer testing, geologic/geophysical borehole logs (from state engineer, Oil & Gas commission, DOE etc.).
Groundwater levels seep/springs	USGS NWIS/national spring database/other

Observed streamflow	USGS NWIS; other local gage sites
Baseline water quality	At limited locations, using water quality data collected by SMWC

Characterization and Conceptualization. In the next step, the data are reviewed and used to produce secondary hydrologic and hydrogeologic characterizations (3D aquifer/aquiclude hydrostratigraphic configurations, groundwater potentiometric surfaces for each aquifer unit, etc.). These characterizations are then used to define a 3D integrated conceptual flow model for the entire system that describes how water enters the system (distributed precipitation, snow etc.), flows through it, and discharges from it (baseflows, actual evapotranspiration etc.). This conceptualization is used as the basis for constructing the numerical model, using either raw or interpreted datasets.

Model Calibration. The model will be calibrated against all available data from multiple years of varying hydrologic conditions, including gaged stream and ditch flows, groundwater water level elevations, seep/spring flows, actual evapotranspiration (https://eeflux-level1.appspot.com/), and snow-course data (snow water equivalent; using SNOTEL, global historical climatology network – GHCN [https://www.ncei.noaa.gov/products/land-based-station/global-historical-climatology-network-daily], and CoCORaHs [https://www.cocorahs.org/]). Key calibration targets for this effort will depend in large part on the availability of baseline observational monitoring data. Calibration will focus on and prioritize areas most affected by land use changes, and, where possible, where water conservation efforts are likely to occur.

Calibration Sensitivity Evaluation. As part of calibration, a sensitivity evaluation will attempt to identify and rank the most important/sensitive model inputs controlling system response (especially of greater land use impacts and future water conservation efforts), including:

- Key surface and subsurface parameters (i.e,. aquifer properties, stream-aquifer leakage)
- External climate
- Recent land use.

Through the calibration process, areas of lower model calibration performance will indicate where underlying data gaps are present, and/or the areas of poor characterization/conceptualization that will require further evaluation. Importantly, any calibration 'error' must be translated into uncertainty in predictions (i.e., a range of possible predicted system conditions). Any simulations of conservation measures must then address/report a range of equally plausible results. Other available tools or evaluations simply will not provide this level of detail and complexity in predicting the nature and range of benefits of conservation measures.
The model will also be used to assess the sensitivity of system flows and storage dynamics to recent land use practices (e.g., irrigation, diversions, groundwater pumping). The sensitivity of individual land use impacts on regional and local-area integrated system hydrologic response will be assessed to the following:

- Groundwater pumping
- Irrigation (diversions, canal leakage, field application, tailwater runoff)
- Urbanization/imperviousness, routing.

Data Gaps. A review of the data collection and synthesis and the results of model calibration will reveal where gaps in data are present. SMWC will identify types and areas where data gaps exist and provide recommendations on where data, data types, and collection frequency can be collected to further improve calibration and reduce uncertainty in predictions.

Deliverable:

The products from Task 1 will include hydrologic and hydrogeologic data gathered for model development listed in Table 1 and maps and figures generated by the model. The data will be housed in a central location hosted on SMWC's website, for all stakeholders to easily access for free. We will produce detailed maps and figures demonstrating the results of model calibration and depicting how surface water flows, especially baseflows, have changed over time. The maps and figures will also be stored on SMWC's website and will be used in the workshop described in Tasks 3.
Once calibrated, we will post-process the substantial amount of output into meaningful, detailed spatial plots, animations, and graphical time series/charts that convey how simulated output like groundwater recharge, groundwater levels, and streamflow vary over the entire coupled hydrologic system, in response to every storm event over a period of many years. We will use post-processed output to evaluate and document the existing range

of system responses to historical climate conditions. These simulations will be geared toward gaining an improved understanding of the baseline hydrology, water quality, and ecology of the San Miguel watershed, providing a sound understanding to build a conservation and drought contingency plan.

ENGINEERING AND LEGAL FEASIBILITY

Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.

Will the Project require state or federal regulatory permits of any type? If yes, please explain.

Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

The SMWC has received all requested funding and in-kind services for a total project value of 240,500 over two years. The total matching funding committed from local governments is $44,000. The SMWC received a Colorado Water Plan Grant from CWCB for 150,000 over two years. Half of the local government match is being applied to work completed in 2023, and half in 2024 ($22,000 each year). The SMWC will be allocating $58,000 from CWCB to project work completed during Task 1. The total budget for Task 1 of the project (which the request to SWCD would support) is $100,000 from January - December, 2023.

A note on applicant cash match: The SMWC is primarily funded through grants. The organization does not have any cash-match or in-kind service is not supported by other grant funding. A very small (~5%) of SMWC's budget is funded through donations. The SMWC's technical project team did contribute a value of $14,015 in in-kind services planning this project during the first half of 2022.

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)

Colorado Water Conservation Board	$58,000 Cash
Town of Telluride	$5,000.00 Cash
Town of Norwood	$1,250.00 Cash
Town of Naturita	$250.00 Cash
Town of Mountain Village	$5,000.00 Cash
San Miguel County	$5,000.00 Cash
Montrose County	$5,000.00 Cash
Town of Ophir	$500.00 Cash
Total Applicant Match (At Least 25%)	$80,000.00
Total Other Funding	
SWCD Request (Up to 50% of Project Cost)	$20,000.00
Total Project Cost	$100,000.00

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
Data collection and GIS synthesis	CWCB, Local Governments, SWCD	$50,000.00
Data gathering for current climate projections	CWCB, Local Governments, SWCD	$10,000
Calibrate regional model	CWCB, Local Governments, SWCD	$37,000.00
Progress reports	CWCB, Local Governments, SWCD	$3,000.00

	Total Project Cost	$100,000
	Grant Administration Costs as a Percentage of Total Project Cost	%0

PREVIOUS SWCD AWARDS AND REQUESTS
Please list all previous requests and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.
The SMWC receives yearly funding from the SWCD to support its water quality monitoring program in the order of $7,000. This support of the organization is not requested through the SWCD grants program.

APPLICANT LIABILITY OR INDEBTEDNESS
Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

FOR LOAN REQUESTS
Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the *Request for Release of Funds* form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Signature

12/9/2022
Date

Printed Name Adrian Bergere

As Authorized Representative for San Miguel Watershed Coalition

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application:
Laura Spann, 970-247-1302, lauras@swwcd.org.

THE SOUTHWESTERN WATER CONSERVATION DISTRICT

Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
KW	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
KW	I have attached documentation that the applicant is a "qualified entity" (see guidelines).
KW	I have attached the applicant's financial statements to demonstrate adequate reserves.
KW	The financial request to SWCD does not exceed 50% of the total project cost.
KW	The applying organization is funding at least 25% of the total project cost.
KW	The request is for funds to be used in 2023, for a project to be completed in 2023.
KW	I understand that SWCD does not fund payroll, legal, or grant administration costs.
KW	I have included a detailed project expense budget.
KW	I have included a detailed project funding budget.
KW	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
KW	Feasibility and/or Engineering Studies
KW	Maps or Photos
	Letters of Support

WATER ACTIVITY SUMMARY			
Date of Submittal	11/16/2022		
Type of Request	Grant X	Loan	Grant/Loan Package
Project Name	Turkey Creek Ditch Rehabilitation		
Applicant	Summit Reservoir and Irrigation Company		
Project Location (River Basin & County)	Dolores/Montezuma		
Amount of Request	$15,500		
Total Project Cost	$31,000		
Applicant Match	$15,500		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
X	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events
Note: The amount of funding each applicant may receive is further limited by the funding received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).		

APPLICANT INFORMATION	
Name of Qualified Entity	Summit Reservoir and Irrigation Company
Type of Qualified Entity (See Guidelines)	Mutual Ditch Company
Mailing Address	PO Box 127 Dolores, CO 81323
Federal ID Number	84-0331430
Public Water System ID (if applicable)	
Contact Person	Katelyn Woodman
Position/Title	Secretary/Treasurer
Phone Number	970-570-5580
Email	summitreservoir@gmail.com

APPLICANT DESCRIPTION

Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment.

Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

Summit Reservoir and Irrigation Company has 400 shares of water and 146 shareholders..
The annual assessment fee per share is $190.00 to provide operating expenses and funds for maintenance projects and capital projects. The annual account fee per shareholder is $265.00, which helps cover office and administrative expenses.

The 146 Summit shareholders bring in $38,690. The 400 Summit shares bring in $76,000 for a total of $114,690 of annual funds available.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measureable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attach a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

Turkey Creek Ditch is one of the two feeder ditches that collect and deliver water to Summit's shareholders. Its source of water is Lost Canyon Creek and Turkey Creek. Water is diverted from the Lost Canyon Creek, high up in the mountains, and is carried down to Joe Moore Reservoir for collection and from there onto the Summit Reservoir. Turkey Creek Ditch was adjudicated on February 1, 1892; as such, it is the oldest part of the Summit system.
Turkey Creek Ditch was expanded and adjudicated again on March 22, 1966. The appropriation dates were June 16, 1886 and March 21, 1905. The ditch is approximately 16 miles long, with most of the ditch within the Forest Service boundary.

According to a 2010 report from the Applegate Group, Turkey Creek Ditch is rated to supply 40% of Summit's water. That is not happening for two reasons. First, roughly 3 years ago, several holes developed along a 100 yard stretch of the ditch about ½ mile from its head. The holes sucked all the water out of the ditch so it ran dry. Second, deferred maintenance on the ditch has reduced its carrying capacity. This is particularly apparent in the top 1/3 of the ditch.
Some of the disappearing water was recaptured in Lost Canyon Creek, but that caused Lost Canyon Creek to overflow its banks, losing water to the Dolores River and also undermining the diversion apparatus to Lost Canyon Ditch.

With this grant, we hope to address this critical situation in the first five miles of Tukey Creek Ditch.

WATER PROJECT TIMELINE

Please provide a narrative description of the timeline for the project's major tasks and/or a detailed outline.

We have put band aids on the holes in Turkey Creek Ditch; stuffing them with carpet remnants and pushing dirt into the holes. We plan to go back and do a permanent fix by imbedding Bentonite into the 100 yard section of the ditch. We also plan to use this opportunity to clear and clean the ditch from its diversion point to its intersection with Lost Canyon Road (Forest Service Road 560), approximately five miles (see attached pictures of debris, dams, fallen trees and blocked channels). We believe that work will rehabilitate the ditch so it can function as originally intended.

As this section of Turkey Creek Ditch is in the high country, it will be impossible to start work until the snow melts and the spring runoff is over. 80% of the runoff occurs between March and June. We expect to start work at the beginning of July 2023 and believe it may take six weeks to complete the work using excavators, chainsaws and manual labor. We hope to complete the work by the first week of September 2023, accounting for rain and any delays.

ENGINEERING AND LEGAL FEASIBILITY

Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain.

No

Will the Project require state or federal regulatory permits of any type? If yes, please explain.

No

Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project.

Applegate Study and 2020 feasibility study on Turkey Creek Ditch by Harris Engineering

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

Pond soil testing for hydraulic conductivity (how much Bentonite is needed). $700
6000 pounds of Bentonite bulk sack from Natural Waterscapes, plus delivery $3600
Excavator rental for 6 weeks $5100
Excavator operator for 6 weeks $9600
Laborers with chainsaws $12,000
$31,000

A two man crew with chainsaws would be:
6 weeks x 40 hours a week x 2 workers = 480 hours x $25/hour = $12,000
SRIC will provide in-kind; the shareholders will be providing equipment and the labor.
The ditch company is bringing in 25% of the total budget. Stockholders have come up with the other 25% of the total budget as well in cash/labor.

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
Summit Reservoir and Irrigation Company	$8,000 In-kind
Summit Reservoir and Irrigation Company	$7,500 in cash to pay for labor/equipment by shareholders.
Total Applicant Match (At Least 25%)	$15,500
Total Other Funding	$
SWCD Request (Up to 50% of Project Cost)	$15,500
Total Project Cost	$31,000

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment.

Note: Please describe any payroll or legal costs, as well as any costs for administering this and

other grants. SWCD will not fund those portions of the project.		
Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
Pond soil testing for hydraulic conductivity	SWCD	700
Bentonite	SRIC	3600
Excavator Rental – 6 weeks	SWCD	5100
Excavator Operator – 6 weeks	SWCD	9600
Two laborers with chainsaws (6 weeks x 40 hours/week x 2 workers = 480 hours x $25/hour = $12,000)	SRIC	12000
No payroll or legal costs		
	Total Project Cost	$31,000
Grant Administration Costs as a Percentage of Total Project Cost		0%

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

2013 for $8,000 – Reservoir Rehab and ditch upgrade

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

Loans	Annual Payment	Remaining Balance	
CWCB #C153445 – Pipeline Canal	**$1,537.56**	**$1,504.97**	Term 2023
CWCB #C153666 – Pipeline Canal	**$1,908.39**	**$3,599.61**	Term 2024
CWCB #C153770 - Siphon pipeline across Millwood Canyon	**$16,826.29**	**$180,707.87**	Term 2036

CWCB : 1313 Sherman Street, Room 718 Denver, CO 80203

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

N/A

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the *Request for Release of Funds* form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

_____ _____

Signature Date

Printed Name_____

As Authorized Representative for _____

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application:

THE SOUTHWESTERN WATER CONSERVATION DISTRICT
Developing and Conserving the Waters of the
SAN JUAN AND DOLORES RIVERS AND THEIR TRIBUTARIES
IN SOUTHWESTERN COLORADO

2023 GENERAL APPLICATION FOR FINANCIAL ASSISTANCE

SWCD SUBMITTAL CHECKLIST	
Required, Please Initial	
JCS	I acknowledge I have read and understand the 2023 SWCD Grant Program Guidelines.
JCS	I have attached documentation that the applicant is a "qualified entity" (see guidelines). Exhibit 1
	I have attached the applicant's financial statements to demonstrate adequate reserves.* N/A
JCS	The financial request to SWCD does not exceed 50% of the total project cost.
JCS	The applying organization is funding at least 25% of the total project cost.*
JCS	The request is for funds to be used in 2023, for a project to be completed in 2023.
JCS	I understand that SWCD does not fund payroll, legal, or grant administration costs.
JCS	I have included a detailed project expense budget.
JCS	I have included a detailed project funding budget.
	I have consulted with SWCD staff to ensure all minimum criteria has been met.
Optional	
	Feasibility and/or Engineering Studies N/A
	Maps or Photos N/A
	Letters of Support

** $13,905.98 in John W. Sanders Internship/Education Fund

WATER ACTIVITY SUMMARY			
Date of Submittal	12/8/22		
Type of Request	(Grant)	Loan	Grant/Loan Package
Project Name	Water in the Ancient World - Conference		
Applicant	San Juan Basin Archaeological Society		
Project Location (River Basin & County)	La Plata County, Animas River		
Amount of Request	$3,000		
Total Project Cost	$35,000		
Applicant Match*	500 + in kind * see * Exhibit 1		
Year for Use of Funds	2023		

WATER ACTIVITY CATEGORY		
X	**Limit**	**Category**
	$60,000	**Water Supply/Watershed Restoration:** Water supply or watershed restoration or enhancement projects, including design, engineering, and construction
X	$20,000	**Public Forums/Studies:** Public forums, workgroups, studies, planning efforts
	$5,000	**Education:** Teaching seminars, workshops, and related programs
	N/A	**Emergency:** Situations arising from catastrophic or unforeseen events

Note: The amount of funding each applicant may receive is further limited by the funding received in any given five-year period, as well as the total amount allocated to each category by the board. Review the guidelines carefully and consult staff if needed (970-247-1302).

APPLICANT INFORMATION	
Name of Qualified Entity	San Juan Basin Archaeological Society
Type of Qualified Entity (See Guidelines)	Colorado Nonprofit Corp-501(3)(C)
Mailing Address	P O Box Durango, Colo. 81302
Federal ID Number	83-3283611 see Exhibit 2
Public Water System ID (if applicable)	N/A
Contact Person	Janice C. Sheftel
Position/Title	Program Chair
Phone Number	970 259 5845
Email	janice.sheftel@gmail.com

APPLICANT DESCRIPTION

Please provide a brief description of the applying entity. For ditch companies, please provide the number of shareholders, acres served, and annual assessment.

Please describe how the Applicant is proactively and financially planning for their own future needs through adequate assessments, reserves, and other means.

1) APPLYING ENTITY: The San Juan Basin Archaeological Society (SJBAS), a Colorado non-profit and a Federal 501©(3) corporation, was established in 1979 "to advocate for and promote public awareness and preservation of archaeological, cultural and historical resources, primarily of the Four Corners region of the American Southwest." SJBAS currently has 160 members.

2) APPLICANT ENTITY FINANCIAL PLANNING: SJBAS proactively plans for its financial future through its annual dues. To ensure that the SJBAS John W. Sanders Education and Internship Fund (JWS Fund) has sufficient money to pay for annual internships at the Center of Southwest Studies, Fort Lewis College (FLC), annual scholarships for the FLC Archaeology Field School, some speaker honorariums, and conferences, SJBAS just raised its dues so that a portion of income goes directly to the JWS Fund. Individual dues are now $25, with $10 to the JWS Fund. Family dues are no $50, with $20 to the JWS Fund. Student dues remain at $10.

WATER ACTIVITY DESCRIPTION

Please provide a narrative description of the activity's physical location, as well as its purpose and benefits. Provide a description of the water supply source to be utilized or the water body affected by the project. If possible, include measureable results such as acres served, watersheds impact, types of crops, number of taps, length of ditch improvements, length of pipe installed, area of habitat improvements, or students impacted. Photos, maps, or other graphics can be inserted here or attached.

Please explain how the project assists SWCD in furthering its statutory mission to protect, conserve, use, and develop the water resources of southwestern Colorado, as well as safeguard all waters to which Colorado is entitled. Specifically, if you project enhances or preserves any pre-compact water rights, please describe the quantities, appropriation dates, and adjudication dates of those rights. Please attached a "Water Rights Tabulation" report from the Colorado Division of Water Resources (DWR). For help acquiring water rights information, call DWR (San Miguel Basin: 970-249-6622, Other Basins: 970-247-1845).

As climate change accelerates, understanding how to manage water, both too little and too much, is becoming an increasingly critical issue. Examples of the worldwide water impacts of climate change include: the worst drought in over 1,000 years in the Southwest U. S.; fires caused by drought in such places as Siberia and Greece; floods occurring in Australia, Germany, the U.S, and elsewhere; and melting glaciers in Greenland and the Antarctic causing sea level rise.

Water and its varied uses have always presented challenges to humankind. Therefore, a collaborative group of scholars and interested individuals is planning a general interest conference to explore strategies from past cultures, both in the Southwest U S. and around the world, concerning ideas these cultures may offer regarding water use and control, and best water practices to address drought and other issues.

The Conference is planned to occur in Fall 2023, with the working title," Water in the Ancient World," to be held on the Fort Lewis College (FLC) campus. Initial cooperating entities would include Wright Palaeohydrological Institute (WPI); FLC entities - the Four Corners Water Center, the Department of Anthropology and the Center of Southwest Studies; Durango area museums including the Powerhouse and the Animas Museum; the Southwestern Water Conservation District; and the San Juan Basin Archaeological Society (SJBAS). (Will add more as replies to additional invitations come in)

The conference Planning Group envisions the Conference taking place over a weekend. Features would include:

Friday night: keynote address, free and open to the public;

Saturday, all day program of about eight to ten lectures, for which there would be a small charge

Sunday field trip for the speakers and the public.

The Conference might also include related evening events earlier in the week as part of the agendas of individual organizations.Both the Friday night and Saturday talks might be in a hybrid format, i.e., with some speakers presenting on Zoom to a gathered audience and perhaps all lectures available to an at-home audience on Zoom. The Conference might also include exhibits at area museums, displays at book stores, and book club discussions on related topics.

WATER PROJECT TIMELINE

Apply Ballantine Family Fund Grant	12/30/22
Issue Speaker and exhibitor Invitations	1/31/23
Finalize speaker list	2/28/23
Complete all funding requests	3/15/23
Make Food Choices/confirm exhibitor's list	4/1/23
Prepare Conference registration materials	4/30/23
Prepare PSA's and other publicity materials	5/15/23
Work with FLC tech services re: recording, Zoom, etc.)	5/15/23
Prepare SW Colorado Humanities Roundtable materials	6/1/23
Organize SJBAS volunteer workers	7/15/23
Prepare Conf. worker instructions	7/15/23
Conference registration deadline	8/15/23
Print conference programs / Finalize Sodexo Food order	8/26/23

Will the Project require the acquisition of an additional water right or change of existing water rights? If yes, please explain. No

Will the Project require state or federal regulatory permits of any type? If yes, please explain. No

Please list below and attach to this application any feasibility studies or investigations that have been completed or are now in progress for the proposed project. None

WATER ACTIVITY BUDGET

Please provide any narrative description of the project expense and funding budget that is necessary. Please provide the anticipated decision date for those funding requests that have not already been approved.

Please include a detailed description of in-kind materials and services, if any, along with the basis for in-kind valuations.

The proposed Conference budget, would need to cover, the following:

Speaker honorariums ($5,500);

Speaker travel expenses ($9,000);

Speaker accommodations and per diem ($11,000)

Conference refreshments and meals ($8,000 for 300 guests);

Conference publicity, programs, etc. ($2,000).

Decision date for funding requests, below, unfulfilled at this time would be May 15, 2023. Speaker related costs could be less if a few speakers participate via Zoom, but travel costs may increase.

IN KIND: The CONFERENCE does not anticipate any meeting room, video/Zoom production or other AV charges, since it will be held at FLC and is co-sponsored by FLC. This in-kind contribution could be valued $1,500-$2,000. SJBAS volunteers will prepare the grant applications, program registration and other forms, and conference publicity materials and provide personnel to manage the conference. SJBAS's in- kind contribution could also be valued at $1,500-$2,000 (at least 40 hours @$50/hour)

MATCHING REQUIREMENTS

Applicants must demonstrate that they are actively contributing to the project for which they are requesting funding. Any grant approval will be contingent upon the recipient ultimately demonstrating that they have secured funding for the full project cost.

In addition, applicants must also demonstrate that they will provide, through a cash contribution and/or the performance of in-kind services, at least 25% of the total project costs. See the guidelines and speak to staff for further clarification. Attach additional information if necessary.

Contributing Entity	Amount and Form of Match (please note whether cash or in-kind)
See attached Exhibit 1	
Total Applicant Match (At Least 25%)	$ 500 * See Exhibit
Total Other Funding	up to $ 31,500
SWCD Request (Up to 50% of Project Cost)	$ 3,000
Total Project Cost	$ 35,000

WATER PROJECT BUDGET

Please provide a detailed project budget. You can use the template below or provide a more detailed table in an attachment. See statemant under Water Activity Budget

Note: Please describe any payroll or legal costs, as well as any costs for administering this and other grants. SWCD will not fund those portions of the project.

Task/Materials Description	Funded By (Applicant, SWCD, Other)	Amount
There will not be any Grant Administration Charges		
	Total Project Cost	$35,000
	Grant Administration Costs as a Percentage of Total Project Cost	0 %

PREVIOUS SWCD AWARDS AND REQUESTS

Please list all previous request and awards from SWCD by year, amount, and project title. Please ensure that your entity does not exceed the five-year limits on awards outlined in the guidelines.

None

APPLICANT LIABILITY OR INDEBTEDNESS

Please list any existing long-term liability (multi-year) or indebtedness that exceeds one thousand dollars. This might include bank loans, government agency loans, or bond issues. Please provide the lender name, address, remaining principal, annual payment, and maturity date. If any of these liabilities are currently in default or have been in default at any time in the past, please provide a detailed explanation. Attach a separate schedule as necessary.

NONE

FOR LOAN REQUESTS

Please identify all revenue sources for the applicant that would be available to repay SWCD should financial assistance be offered in the form of a loan.

Request only grant.

APPLICANT SIGNATURE

By signing below, I acknowledge I have read the 2023 SWCD Grant Program guidelines, I understand the program requirements, and I submit this application, which is complete and true to the best of my knowledge.

Should the grant funds be awarded, I understand that the grant funds shall only be used by a qualified entity for the specific purpose(s) described in my SWCD grant application and up to the amount indicated in SWCD's grant approval letter.

I understand that grant funding may be requested when needed in 2023. Upon the District's receipt of the *Request for Release of Funds* form, documentation showing the applicant continues to be a qualified entity and that all other matching project funds required by the District's 2023 Grant Program Guidelines have been committed and secured, the grant will be made available.

If the intended use of grant funds changes, I am required to inform SWCD staff and further review and approval by the District's Board will be necessary. The District may require additional documentation regarding the use of the funds at its discretion.

In addition, in the event the project, study, or program for which the grant was awarded ultimately comes in under budget, I must return a pro-rata portion of the remaining funds to the District within 45 days of completion. For example, if the completed project, study, or program is $20,000 under budget, and SWCD contributed 20% of the total project costs, then the grant recipient shall be required to return $4,000 (20% of $20,000) to SWCD.

I acknowledge that a final written report, including a description of work completed and a detailed accounting of the use of funds, will be due to SWCD within three (3) months of the final expenditure or by December 31, 2023, whichever occurs first. If the Applicant cannot submit the final report by the deadline, they must submit a written request for an extension of time to SWCD staff prior to December 31, 2023 that explains the reporting delay and a proposed final submittal date. The Board will not consider future grant requests from Applicants that do not comply with this provision and submit an acceptable final report.

If progress toward completion of the project has not occurred in 2023, I understand that it is necessary to submit a written grant extension request.

Janice C Sheftel

Signature

12/8/22

Date

Printed Name Janice C. Sheftel, Program Chair

As Authorized Representative for San Juan Basin Archaeological Society

Please sign and submit the completed application and any supplemental information via email to lauras@swwcd.org or mail it to SWCD 841 E. 2nd Ave., Durango, CO 81301.

Do not hesitate to contact staff with any questions as you develop your application:
Laura Spann, 970-247-1302, lauras@swwcd.org.

Water in the Ancient World Conference, Exhibit 1 - Funding

Granting Entity	Cash Contribution
Ballantine Family Fund	$ 3,500
Bureau of Reclamation	500
Colorado Humanities Council	1,000
Colorado Water Conservation Board	500
Community Foundation	500
Conference Fees (275/$50)	13,750
Division of Water Resources	250
Dolores Water Conservancy District	500
Exhibitor Fees (10/$200)	2,000
Fort Lewis College Anthropology Dept.	500 (Plus $2,000 in-kind services)
LPEA	1,000
Merrion Foundation	500
San Basin Archaeological Society	500 (Plus $2,000 in-kind services) *
Southern Ute Indian Colorado	500
Wright Water Engineers	3,000
Private Contributions	3,500

*While SJBAS, itself, cannot provide 25% of total project costs, it will provide more than that amount through its own contribution and that of other entities

REPORTS

KOGOVSEK
& ASSOCIATES, INC.

TO: Southwestern Colorado Water Conservation District

FROM: Christine Arbogast

DATE: January 9, 2022

RE: Board meeting report

I hope the New Year is beginning well for you, and that you enjoyed the holiday season with your family and friends.

As you know, Congress is now organizing after a rocky beginning. The Senate has been working on its committee make up. Perhaps the biggest change will be on the appropriations committee, where the long-term chairman and ranking member retired.

The House still has significant organization to accomplish before the real focus turns to legislating, including bill introduction, hearings and mark ups. The committee chairmanships will reverse from the previous Congress with Republican majority. Committee assignments are not expected to change significantly for our delegation, but we will watch to see what committees our two freshman members, Brittany Pettersen and Yadira Caraveo receive. They are not expected to seek seats on House Natural Resources.

Resources will be chaired by Congressman Westerman of Arkansas, and the water subcommittee will be chaired by Congressman Bentz of Oregon. The Water, Oceans and Wildlife Subcommittee (WOW) will now be called the WWF, Water, Wildlife and Fisheries.

In terms of focus, I believe you will see and visible shift from climate and conservation to resource development and production, including energy and forestry. It is also expected that there will be significant effort in the House to reform the Endangered Species Act and possibly the National Environmental Policy Act. And, there will likely be significant hearings if not bill consideration following the recent release of the revised Waters of the United States rule. (A summary of the impacts of the revised rule is being prepared and I will distribute when it is received.)

And of course, a great deal of activity will be in the development of the new five-year farm bill. Again, the House is very likely to focus less on conservation and climate and more on agricultural production and reducing regulation, setting up a significant fight with the Senate. This is a place where we will also see the forest production focus on full display.

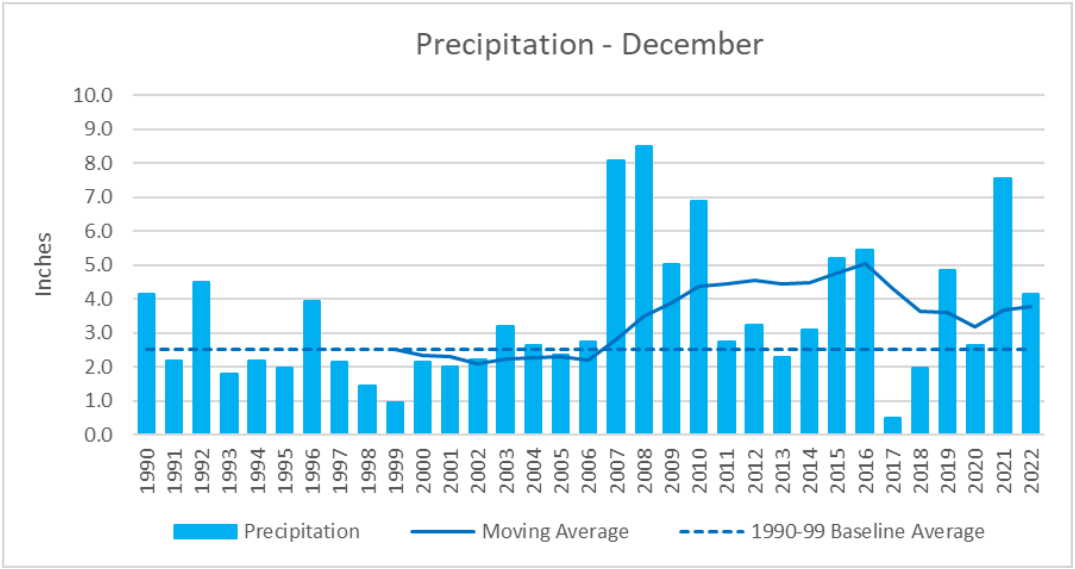
There is also a strong expectation for attempts to rescind or claw back some of the previous spending which has taken place, particularly on climate and social programs. I do not believe that the infrastructure funding for Western water will be a target for rescission, but there are likely to be hearings on how Reclamation is disbursing funds and at what pace. Frankly, they've done a good job at getting the first year money out the door.

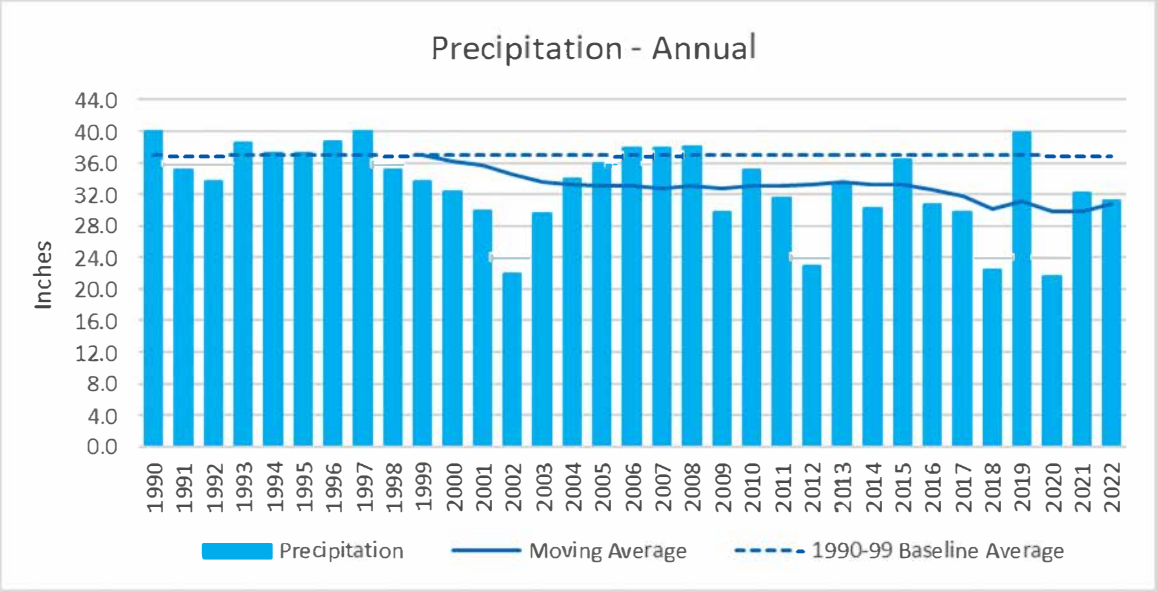
I will be monitoring introduction of bills of interest, and of course any discussion or action related to the Colorado River drought. Members of the Upper Colorado delegation will be working on the long-term funding solution for the endangered fish recovery programs after the one-year legislation was passed as part of the omnibus appropriations bill. Also included was a two-year authorization for the system conservation program designed to help reduce issues in the Colorado system. Whether there are any additional bills related to the drought remains to be seen.

Let me also mention that the Rio Grande Security Act which was under consideration at the end of last year did not pass. While I am confident that it will be introduced again in this Congress, its primary advocate Congresswoman Stansbury of New Mexico has reached out to have discussions with Colorado to see if we can find common ground in light of Colorado's strong opposition. The Southwestern District will be at the table for those discussions along with the Rio Grande Water Conservation District and the State of Colorado.

Understanding this report is vague on specifics given the start of the new Congress, I will keep you posted between now and the next board meeting on major developmenrs.

Preliminary Data - San Juan Mountains - From Norton & Preston




Precipitation - Annual
Inches
44.0
40.0
36.0
32.0
28.0
24.0
20.0
16.0
12.0
8.0
4.0
0.0
1990
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2022
Precipitation
Moving Average
1990-99 Baseline Average

Colorado River Basin Water Supply Briefing

January 9, 2023

Cody Moser - Hydrologist
Colorado Basin River Forecast Center

Presentation Overview

Precipitation Review

Model Soil Moisture Conditions

Current Snowpack Conditions

2023 Water Supply Forecasts

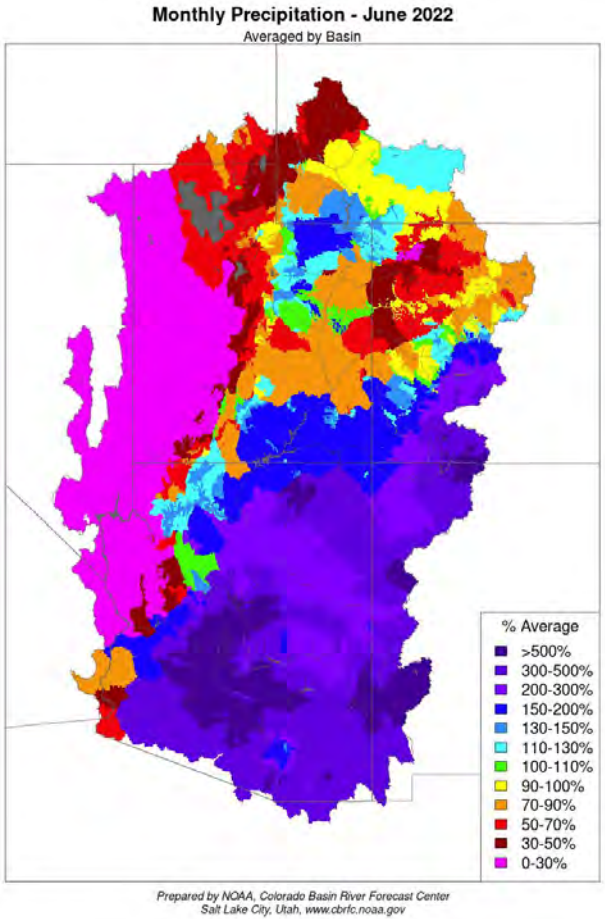
Early Season Forecast Error

Upcoming Weather

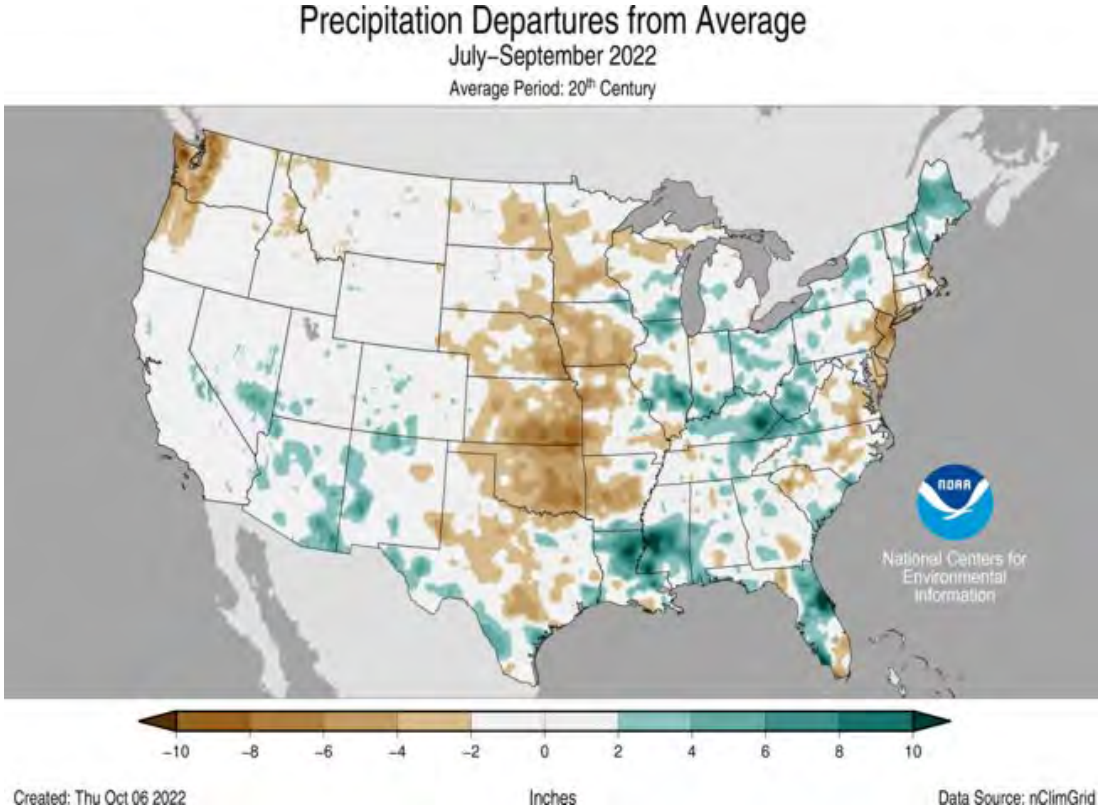
Contacts & Questions

Webinar recording & slides will be made available on CBRFC webpage.

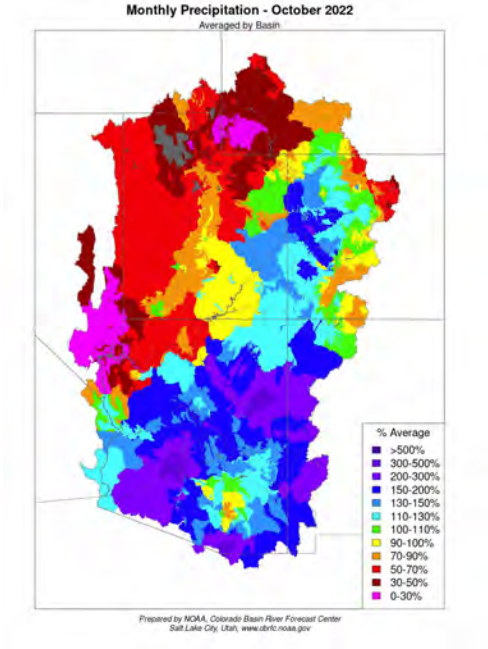
Southwest Monsoon Season Precipitation



Arizona State Climatologist: "9th wettest June-September on record."

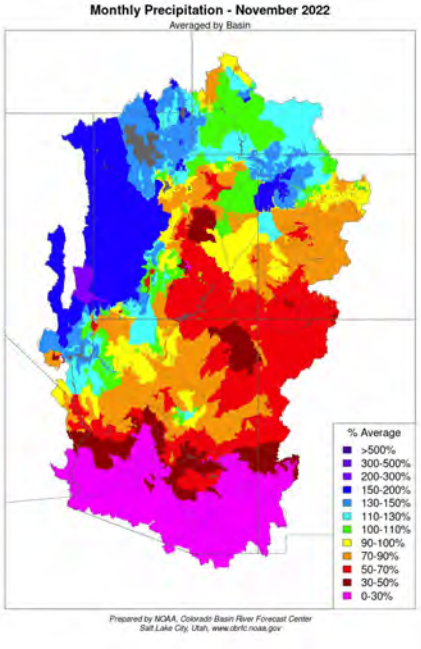


Water Year 2023 (October-December) Monthly Precipitation Summary



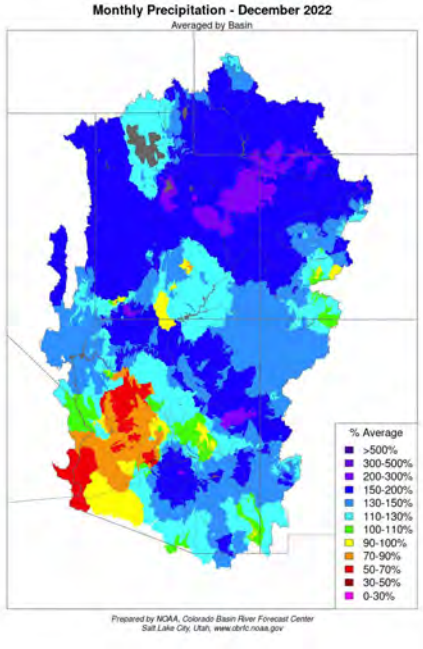
Moisture continued over southern/eastern basins during the first half of October.

An October 22-27 storm system delivered the first snow of water year 2023 across higher elevations of the UCRB and GB.



A few storm systems moved through the region during November, with precipitation primarily targeting western UT, southwest WY, and northwest CO.

Snowpack conditions as a percent of normal generally improved across northern basins and declined across southern basins, with brief periods of low and mid-elevation snowmelt occurring during the month.

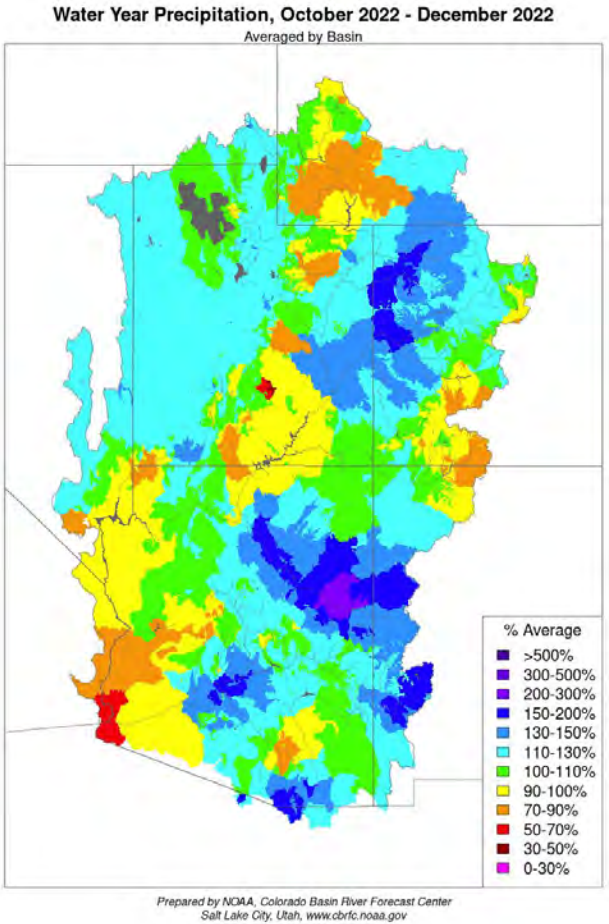


Active weather occurred during much of December across the CRB and GB, with only a handful of days during the month seeing no precipitation.

A number of SNOTEL stations across the Wasatch Range in UT and Sierra Madre/Park Ranges in northwest CO reported December precipitation values above the 90th percentile and ranking in the wettest five on record.

Water Year 2023 (October - December) Precipitation

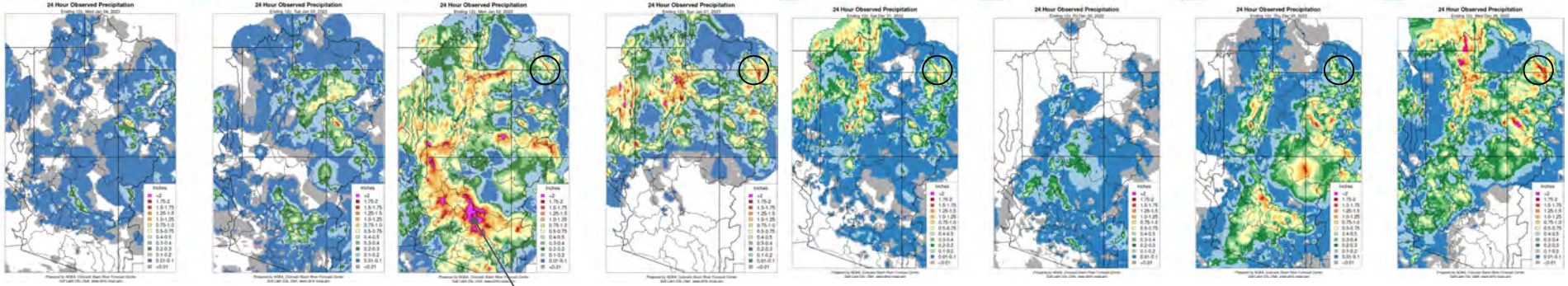
Water year precipitation can be used as a good indicator of early season water supply conditions, and is currently near to above average across most of the region.

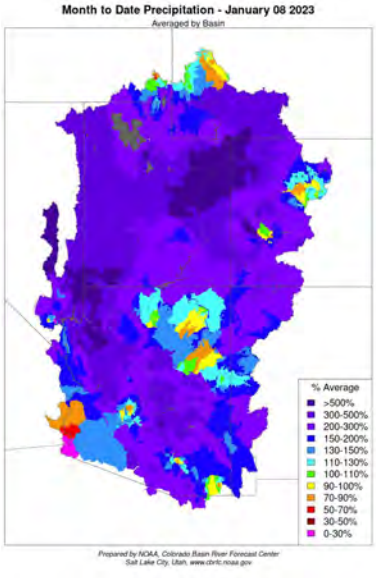


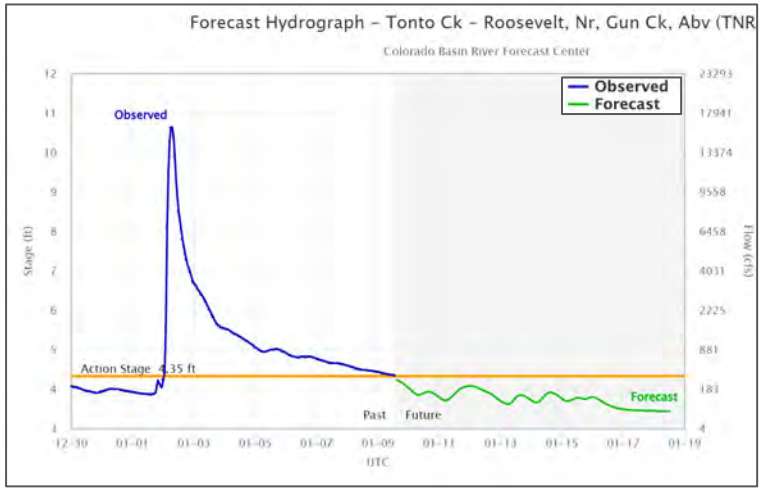
Water Year 2023 CBRFC Precipitation (Significant Runoff Areas) Percent of 1991-2020 Average				
UPPER COLORADO RIVER BASIN				
	Oct	Nov	Dec	Oct-Dec
Above Lake Powell	84	82	152	107
Green River Basin				
Above Fontenelle	48	92	140	98
Above Flaming Gorge	51	101	156	105
Yampa/White	82	102	179	124
Duchesne	49	86	178	103
Price/San Rafael/Dirty Devil	82	83	181	118
Colorado River Headwaters				
Above Kremmling	58	90	150	101
Eagle	101	86	146	111
Roaring Fork	103	81	142	108
Above Cameo	87	86	148	107
Southwest Colorado				
Gunnison	97	74	136	103
Dolores	113	64	152	109
San Juan	97	62	119	92
LOWER COLORADO RIVER BASIN				
Virgin	77	172	113	121
Little Colorado	166	81	121	123
Verde	158	79	114	115
Salt	143	50	126	109
Upper Gila	196	26	140	130
GREAT BASIN				
Bear	58	120	143	114
Weber	58	133	157	121
Six Creeks	77	130	157	125
Provo/Utah Lake	77	108	177	124
Sevier	85	109	149	116

~New Years Event (December 27 - January 3)

04 January | 03 | 02 | 01 | 31 | 30 | 29 | 28 December



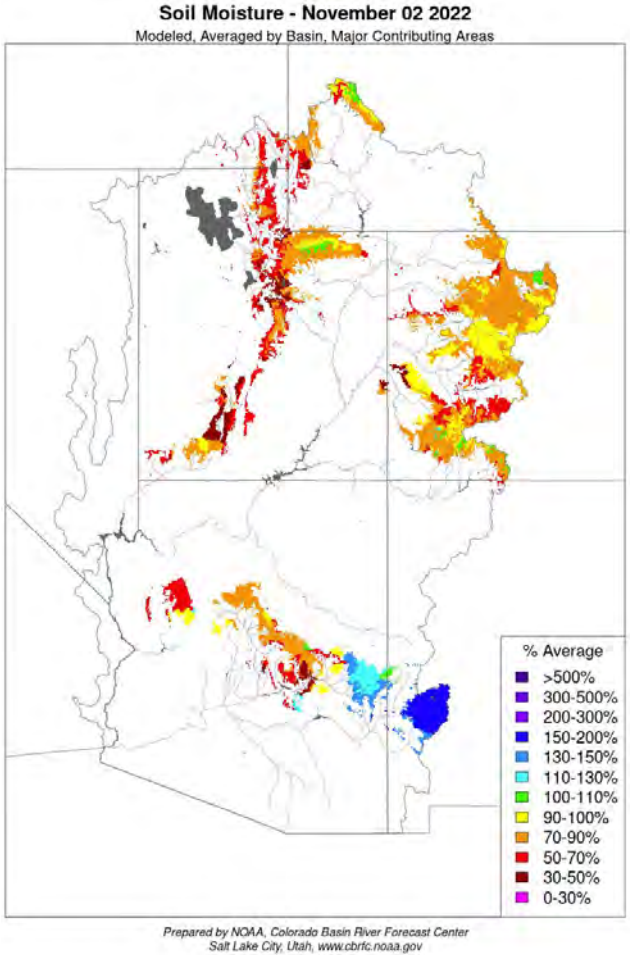




- More beneficial to UT and central AZ vs. CO
  - Exception: Yampa/White basins in NW CO
- Snow across higher elevations
- Rain/snow mix across lower elevations

[Link to CBRFC Observed Daily Precip Graphics]

Fall 2022 Model Soil Moisture Conditions



The map shows the model soil moisture conditions from the lower soil zone in CBRFC's hydrologic model. Modeled lower zone soil water content is a result of past hydrologic conditions including but not limited to:

- -previous year(s) runoff
- -summer/fall precipitation

Soil moisture content is adjusted every fall during a dry period after irrigation season has ended and before winter. Forecasters use the following data to make adjustments:

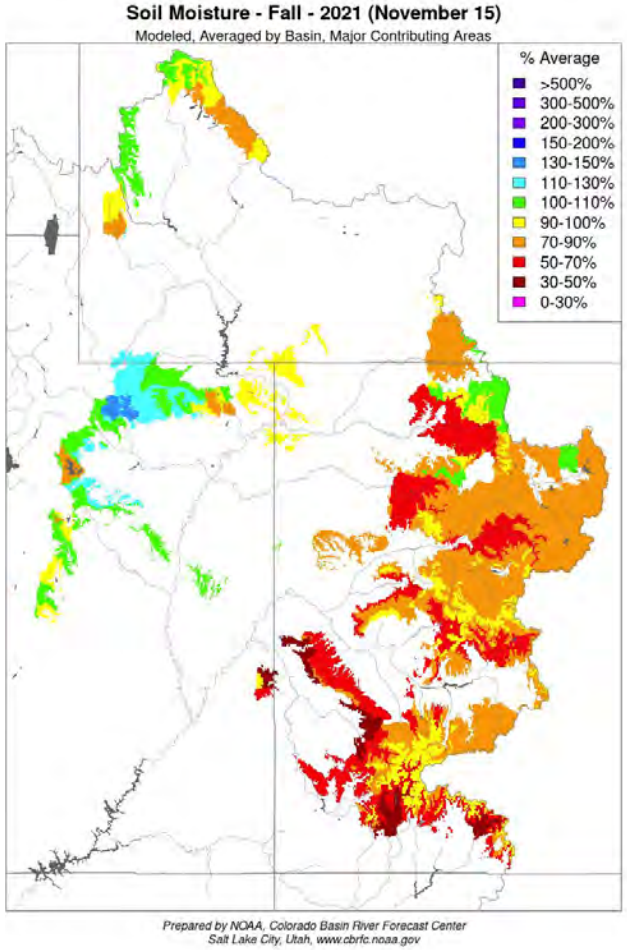
- -Early November streamflow observations (baseflow)
- -Reservoir inflows
- -July-October precipitation
- -Past season(s) runoff conditions

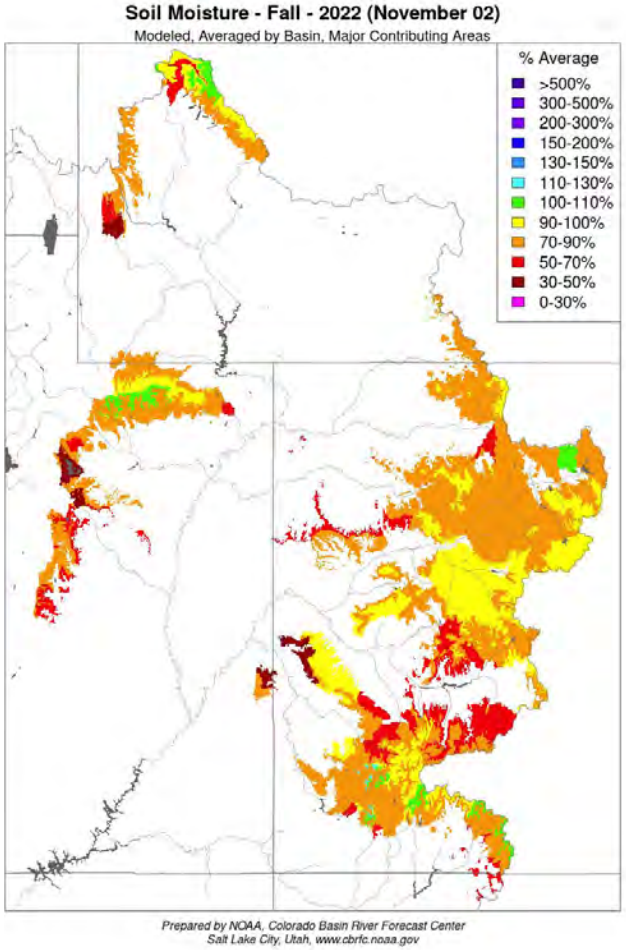
CBRFC model soil moisture conditions are near to below normal across many of the major runoff producing areas.

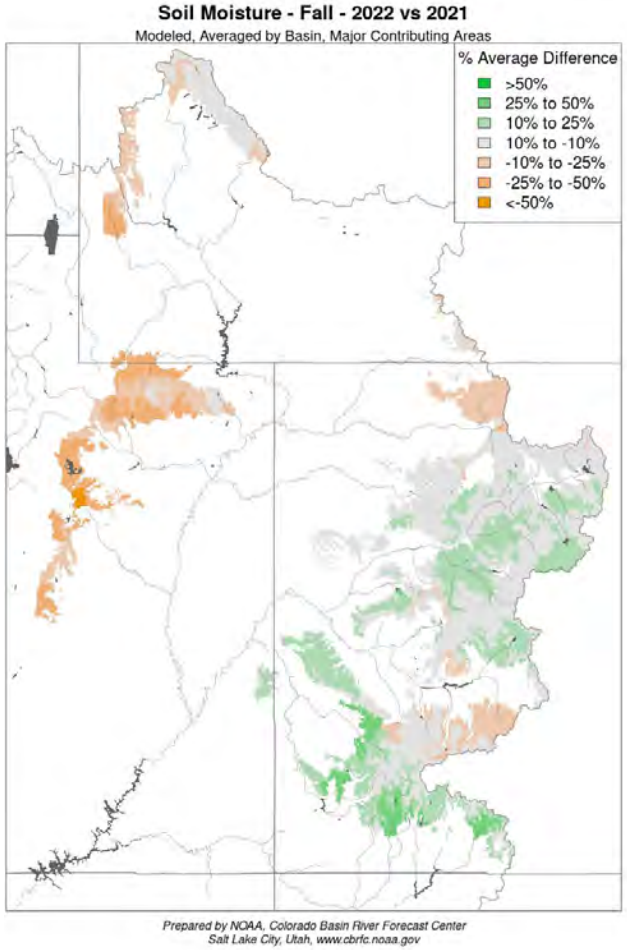
Generally better conditions in the Colorado River Basin compared to the Great Basin.

The timing and magnitude of spring runoff is ultimately a result of SWE conditions, spring weather, and antecedent soil moisture conditions.

UCRB Fall Model Soil Moisture Conditions: 2021 vs. 2022

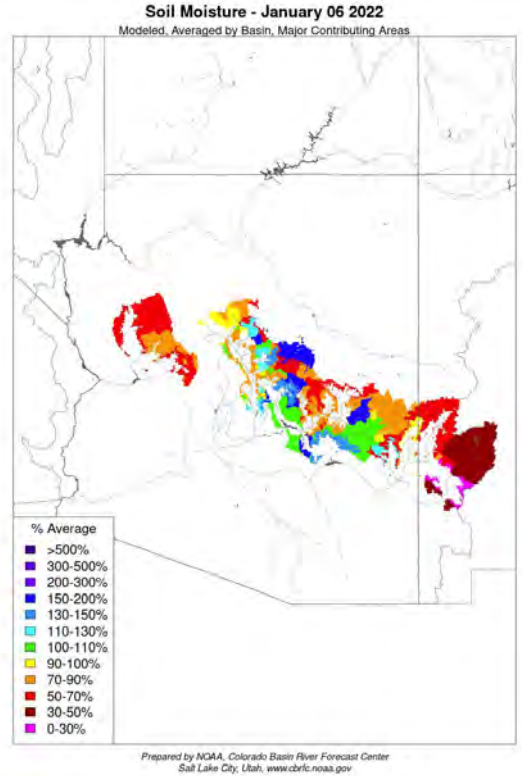


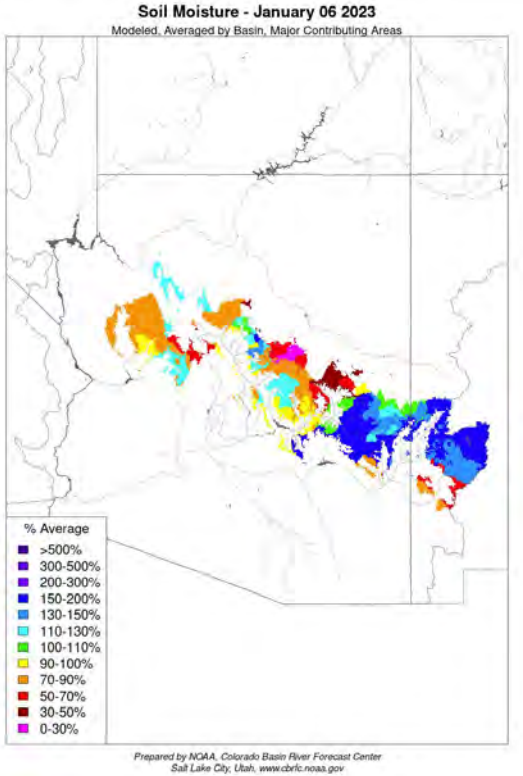




LCRB Soil Moisture Conditions

Model soil moisture conditions across the Lower Colorado River Basin are variable, with conditions generally improving from west to east across AZ.

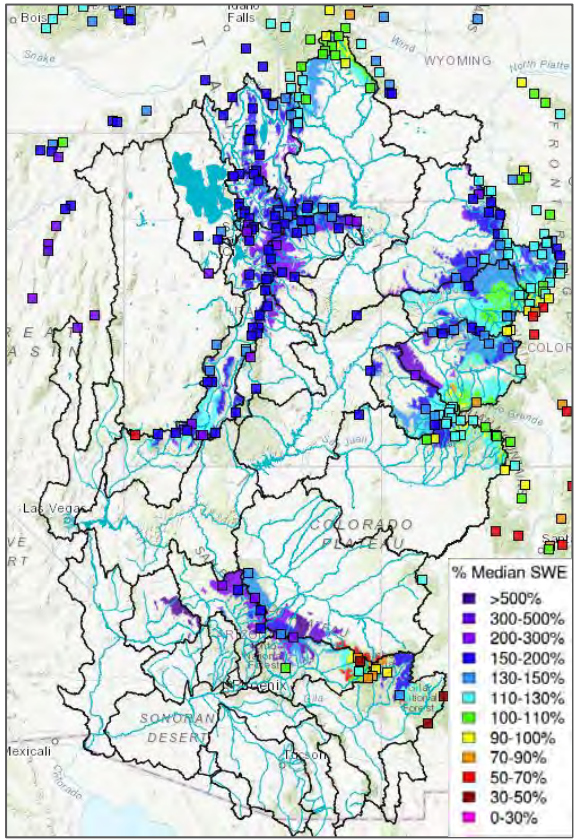




Water Year 2023 Snowpack Conditions

January 8 SWE Conditions

NRCS SNOTEL Observed (Squares)
CBRFC Model (Significant Areas)

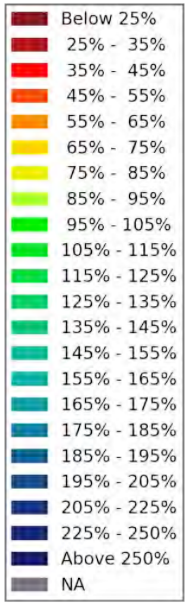


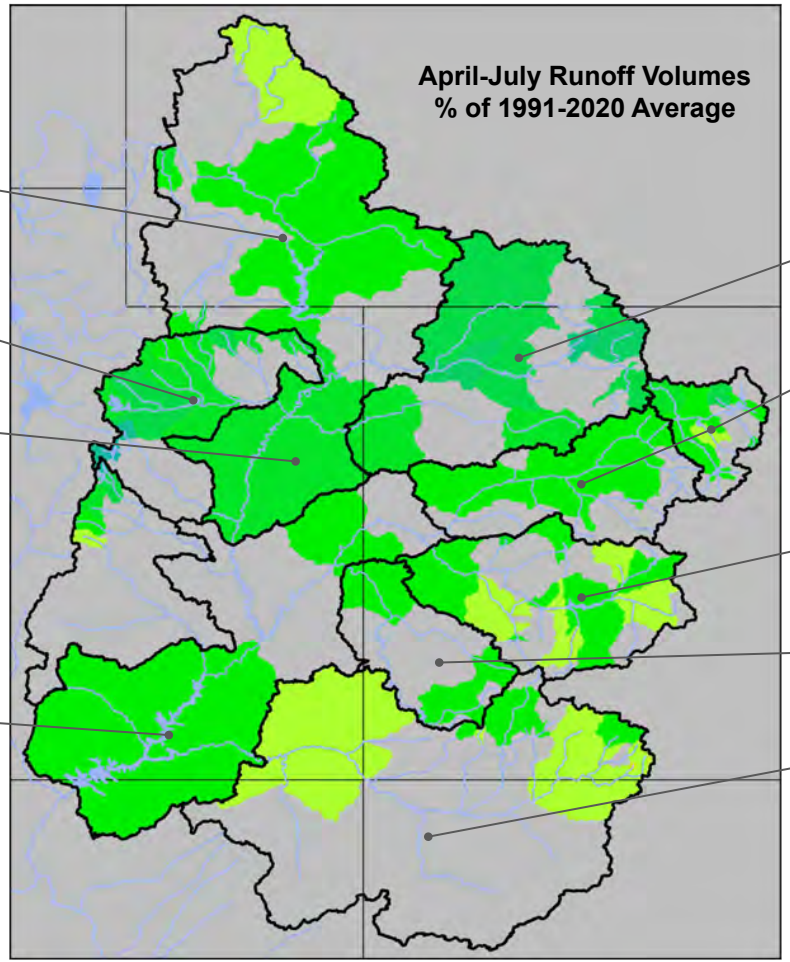
Water Year 2023 CBRFC Model SWE (Significant Runoff Areas) Percent of 1991-2020 Median			
UPPER COLORADO RIVER BASIN			
	Dec1	Jan1	Jan8
Above Lake Powell	91	126	134
Green River Basin			
Above Fontenelle	97	112	113
Above Flaming Gorge	104	127	129
Yampa/White	115	160	160
Duchesne	91	146	165
Price/San Rafael/Dirty Devil	123	164	188
Colorado River Headwaters			
Above Kremmling	84	122	117
Eagle	95	118	110
Roaring Fork	91	114	115
Above Cameo	89	122	119
Southwest Colorado			
Gunnison	85	117	128
Dolores	67	122	141
San Juan	64	87	107
LOWER COLORADO RIVER BASIN			
Virgin	141	121	156
Little Colorado	2	49	140
Verde	0	108	228
Salt	38	52	112
Upper Gila	0	28	92
GREAT BASIN			
Bear	160	165	164
Weber	197	180	181
Six Creeks	210	188	195
Provo/Utah Lake	177	187	209
Sevier	148	159	167

Early January SWE conditions are near to above normal across the Colorado River Basin.

Improvements since Jan 1 in many basins.

Jan 1st Water Supply Forecasts: Upper Colorado





Upper Green: 90-105%

Duchesne: 95-125%

Lower Green: 95-160%

Lake Powell: 105%

Lake Powell summarizes the hydrologic conditions throughout the Upper Colorado River Basin.

White/Yampa: 110-140%

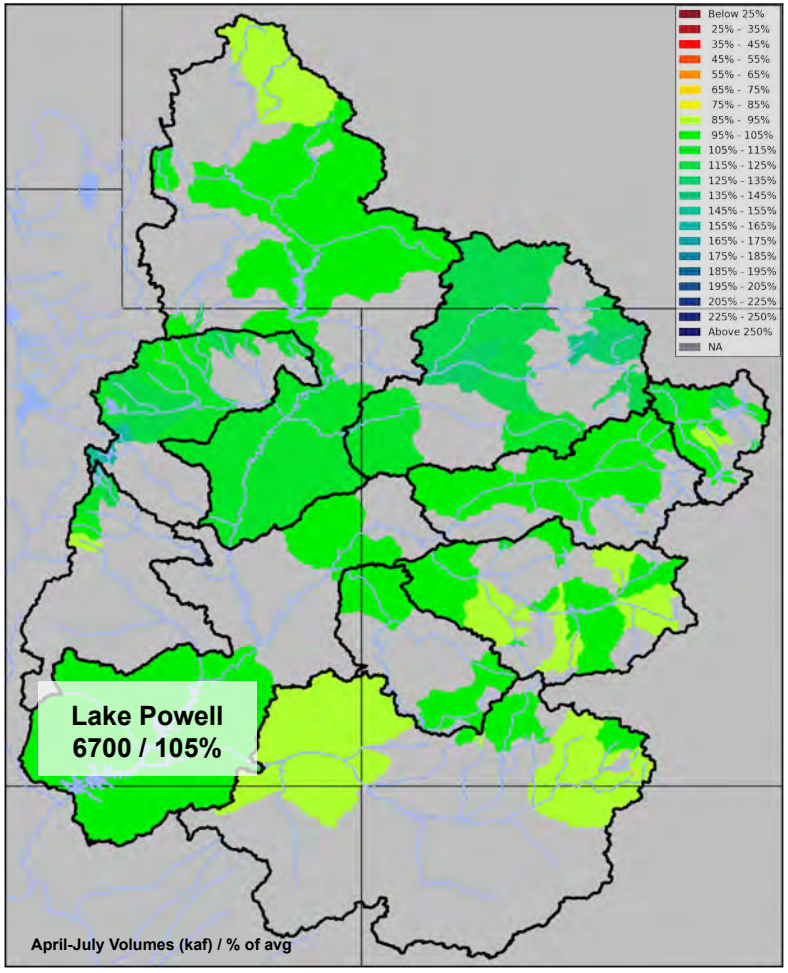
Upper CO: 90-120%

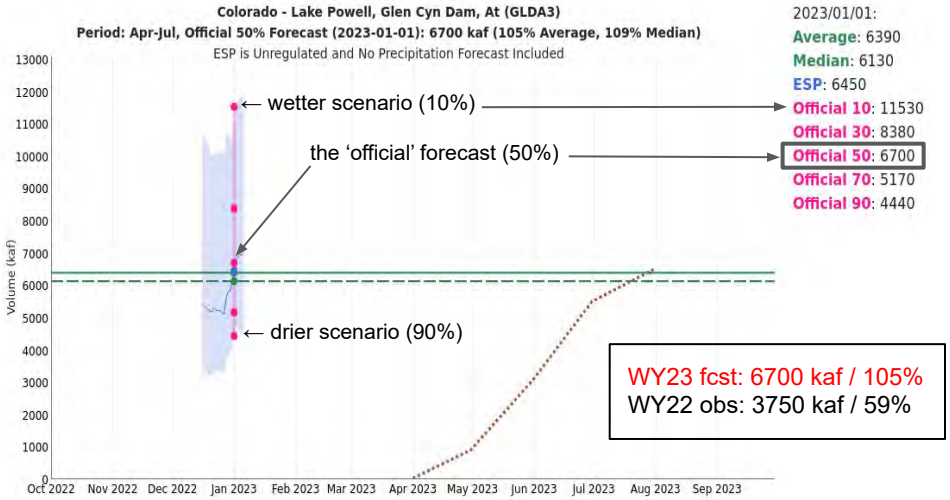
Gunnison: 90-110%

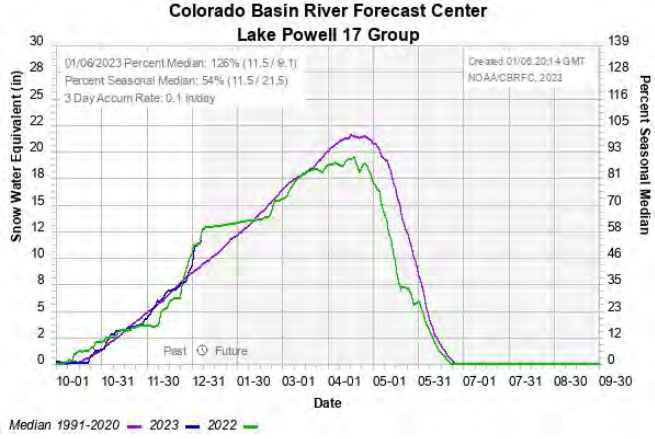
Dolores: 100-105%

San Juan: 85-100%

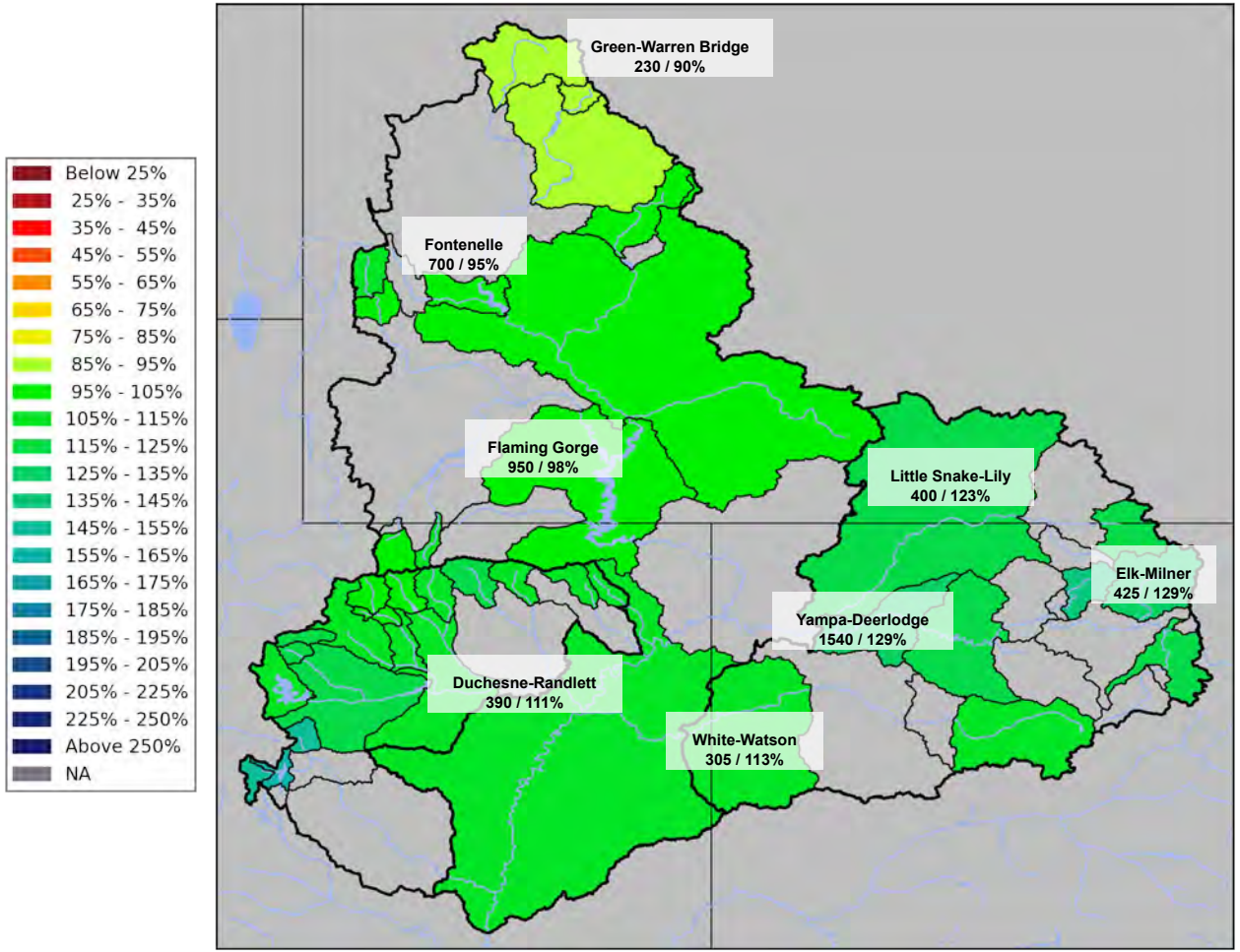
Jan 1st Water Supply Forecasts: Upper Colorado (Lake Powell)







Jan 1st Water Supply Forecasts: Green, Yampa, White, Duchesne



January 1st 2023 Forecasts

Volume (kaf) / % of 1991-2020 avg

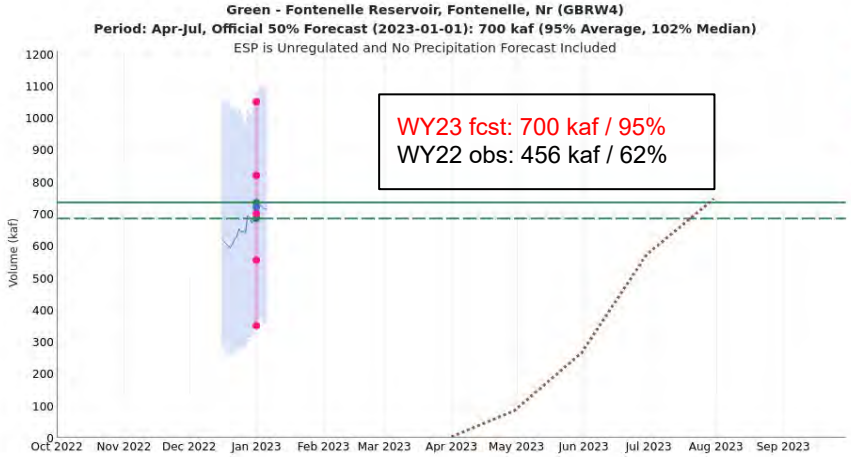
Forecast Ranges

Upper Green: 90 - 105%

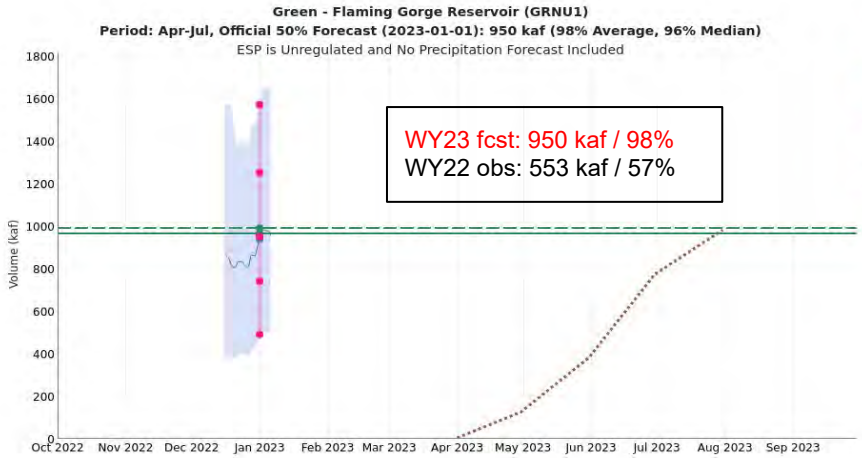
Yampa/White: 110 - 140%

Duchesne: 95 - 125%

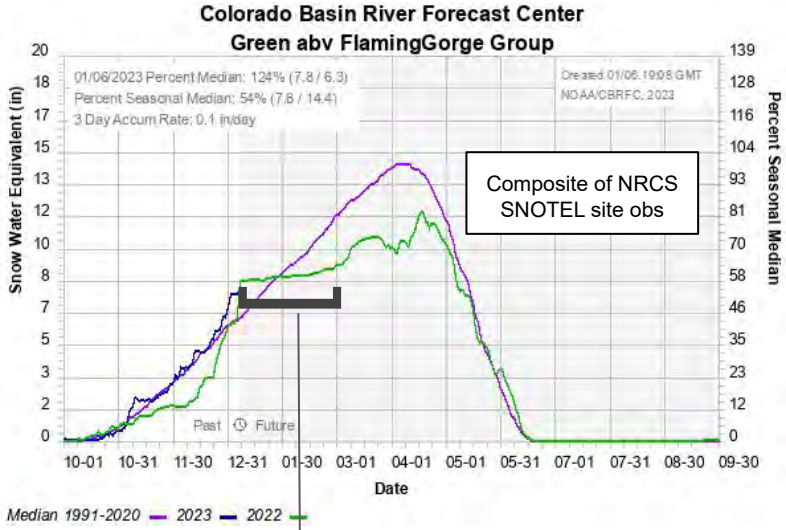
Upper Green Water Supply Forecasts & Snow Conditions



2023/01/01:
Average: 735
Median: 685
ESP: 720
Official 10: 1050
Official 30: 820
Official 50: 700
Official 70: 555
Official 90: 350



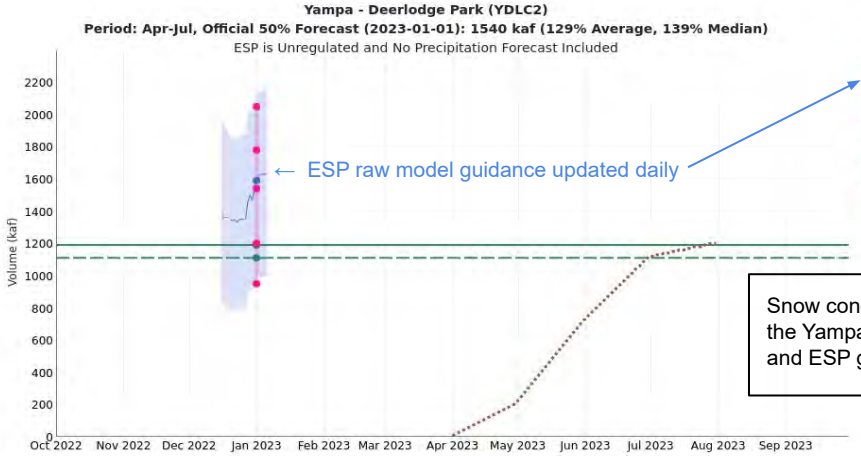
2023/01/01:
Average: 965
Median: 990
ESP: 939
Official 10: 1570
Official 30: 1250
Official 50: 950
Official 70: 740
Official 90: 490



Very dry Jan/Feb 2022 across the region.

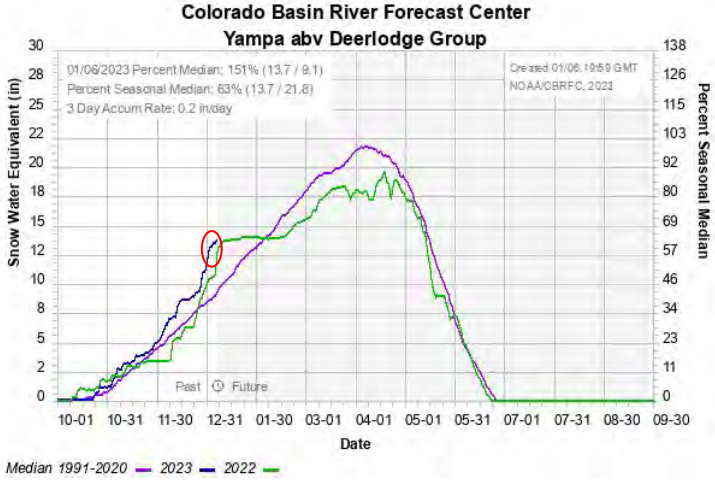
Precipitation ranked in the bottom five at most SNOTEL sites across Utah, southwest Wyoming, and western Colorado during Jan/Feb/Mar.

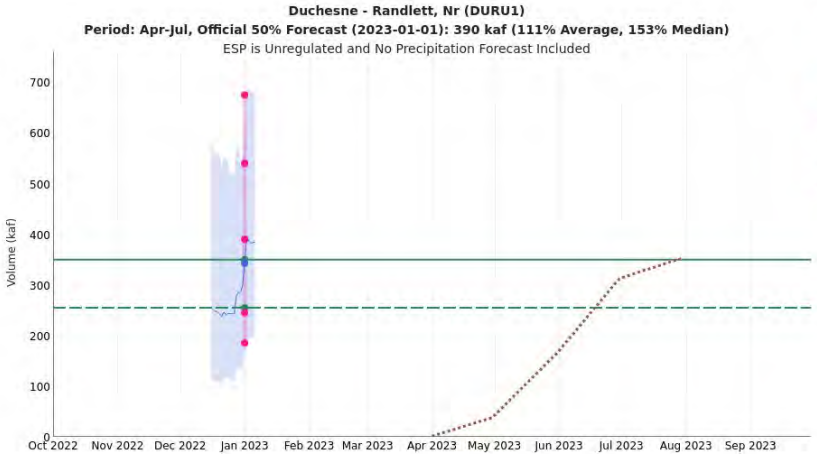
Yampa & Duchesne Water Supply Forecasts & Snow Conditions



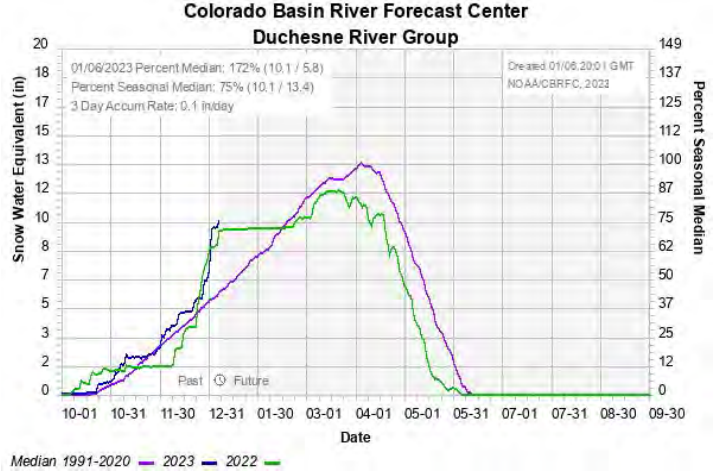
2023/01/01:
Average: 1190
Median: 1110
ESP: 1590
Official 10: 2050
Official 30: 1780
Official 50: 1540
Official 70: 1200
Official 90: 950

Snow conditions have improved in the Yampa River Basin since Jan 1 and ESP guidance has responded.





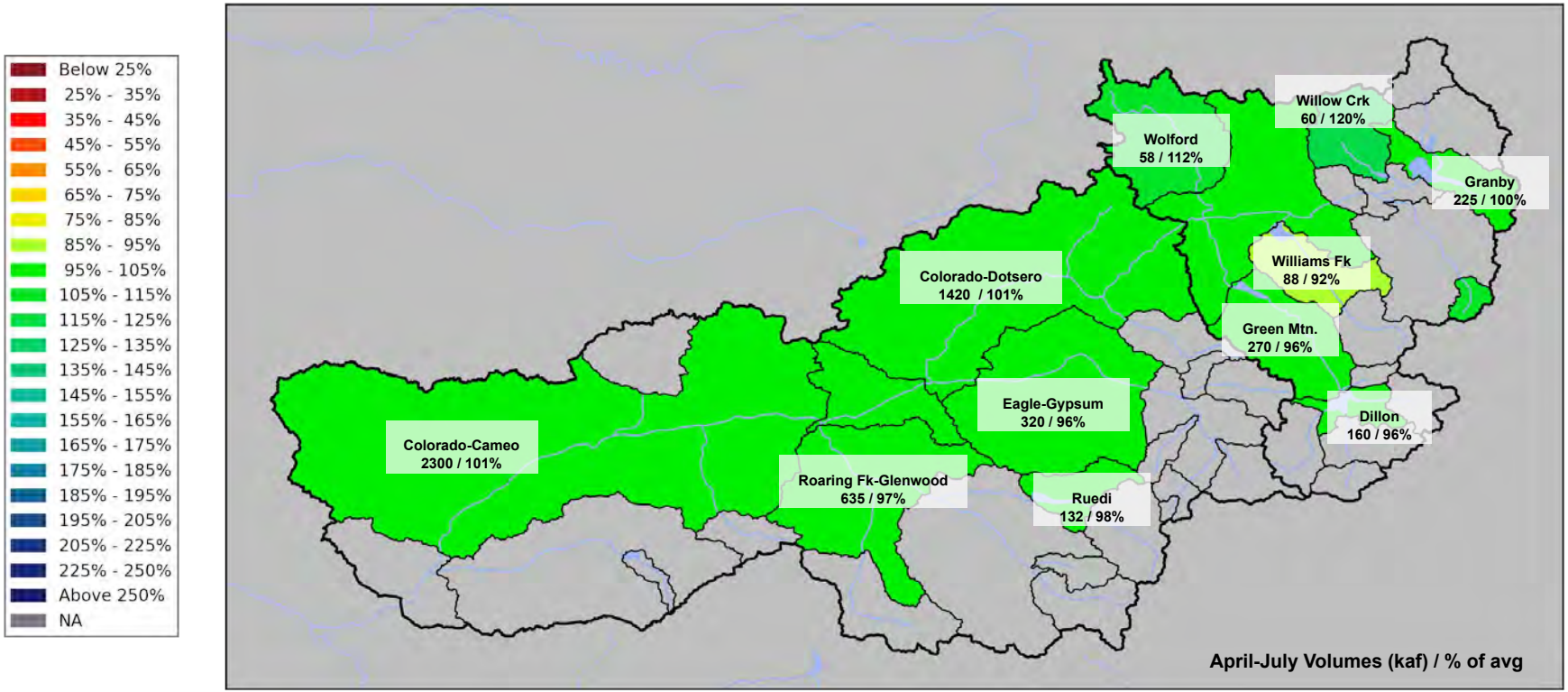
2023/01/01:
Average: 350
Median: 255
ESP: 343
Official 10: 675
Official 30: 540
Official 50: 390
Official 70: 245
Official 90: 185



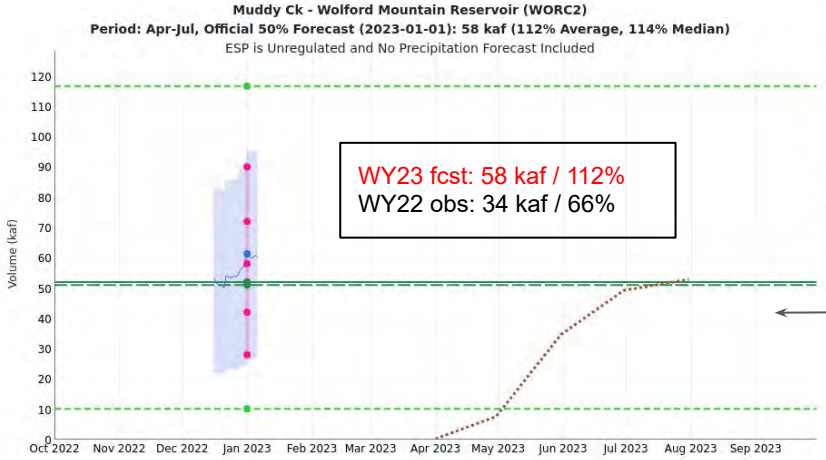
Jan 1st Water Supply Forecasts: Upper Colorado River Mainstem

Forecast Ranges:

Granby to Kremmling: 90 - 120% of average
Kremmling to Cameo: 95 - 100% of average

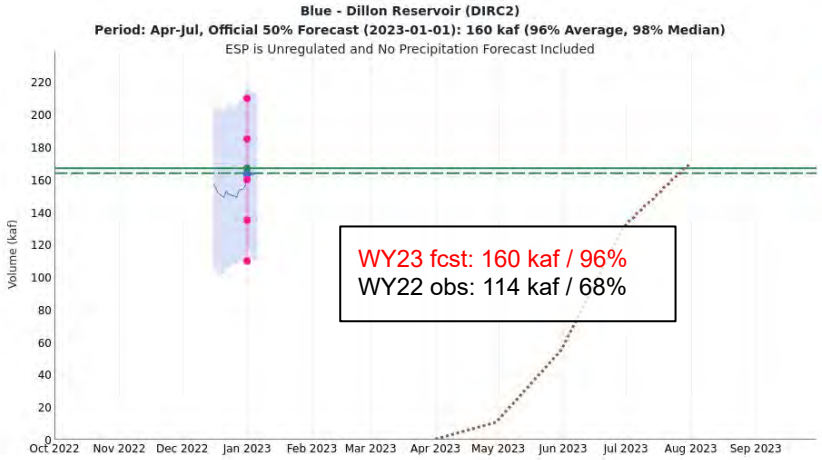


Upper Colorado Mainstem Water Supply Forecasts & Snow Conditions



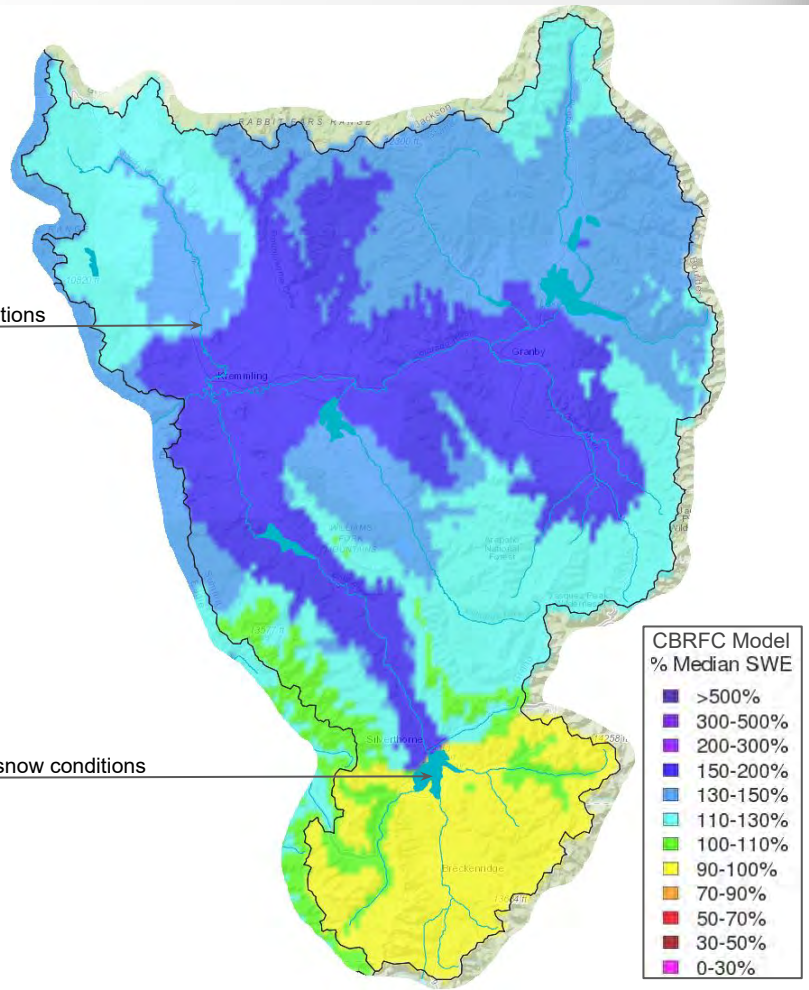
2023/01/01:
Max 2011: 116.6
Min 2002: 10.14
Average: 52
Median: 51
ESP: 61.3
Official 10: 90
Official 30: 72
Official 50: 58
Official 70: 42
Official 90: 28

Above normal snow conditions



2023/01/01:
Average: 167
Median: 164
ESP: 163
Official 10: 210
Official 30: 185
Official 50: 160
Official 70: 135
Official 90: 110

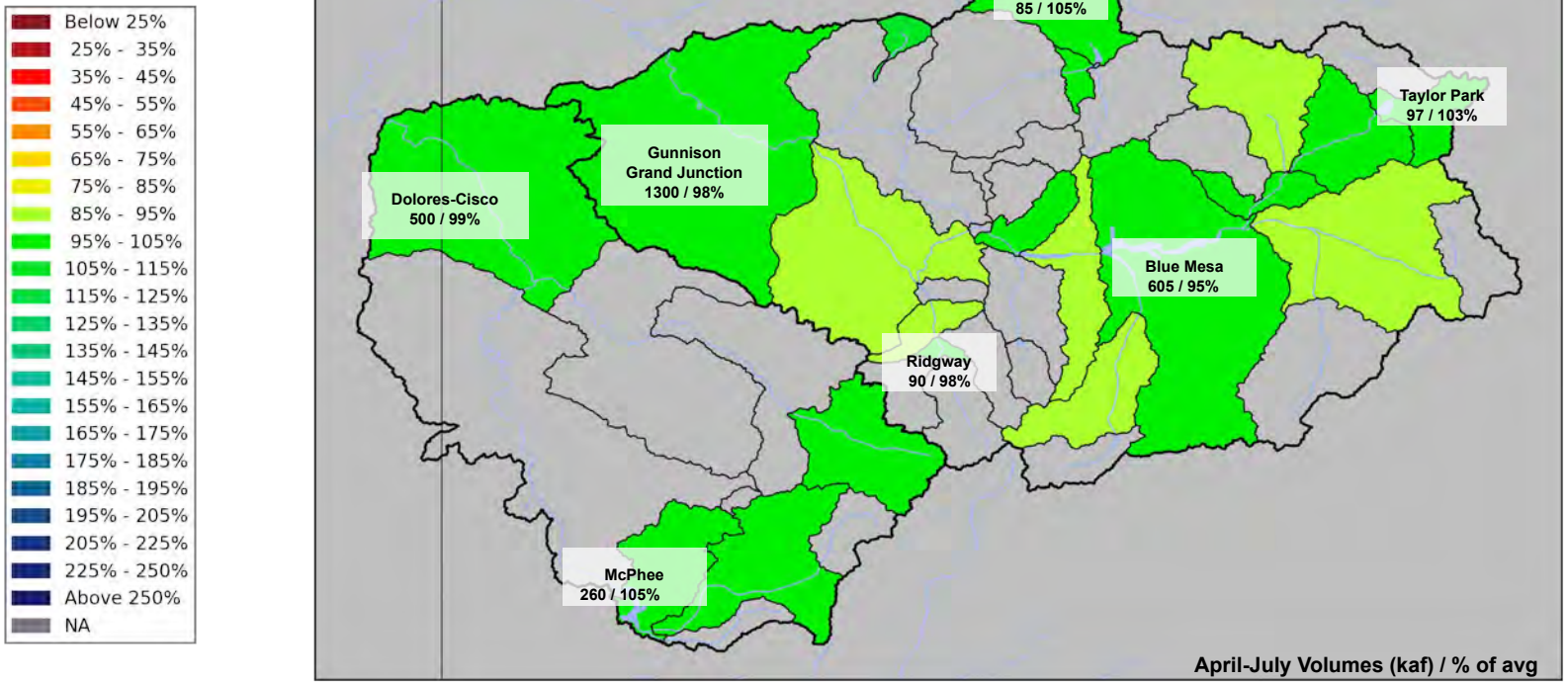
Near normal snow conditions



Jan 1st Water Supply Forecasts: Gunnison, Dolores

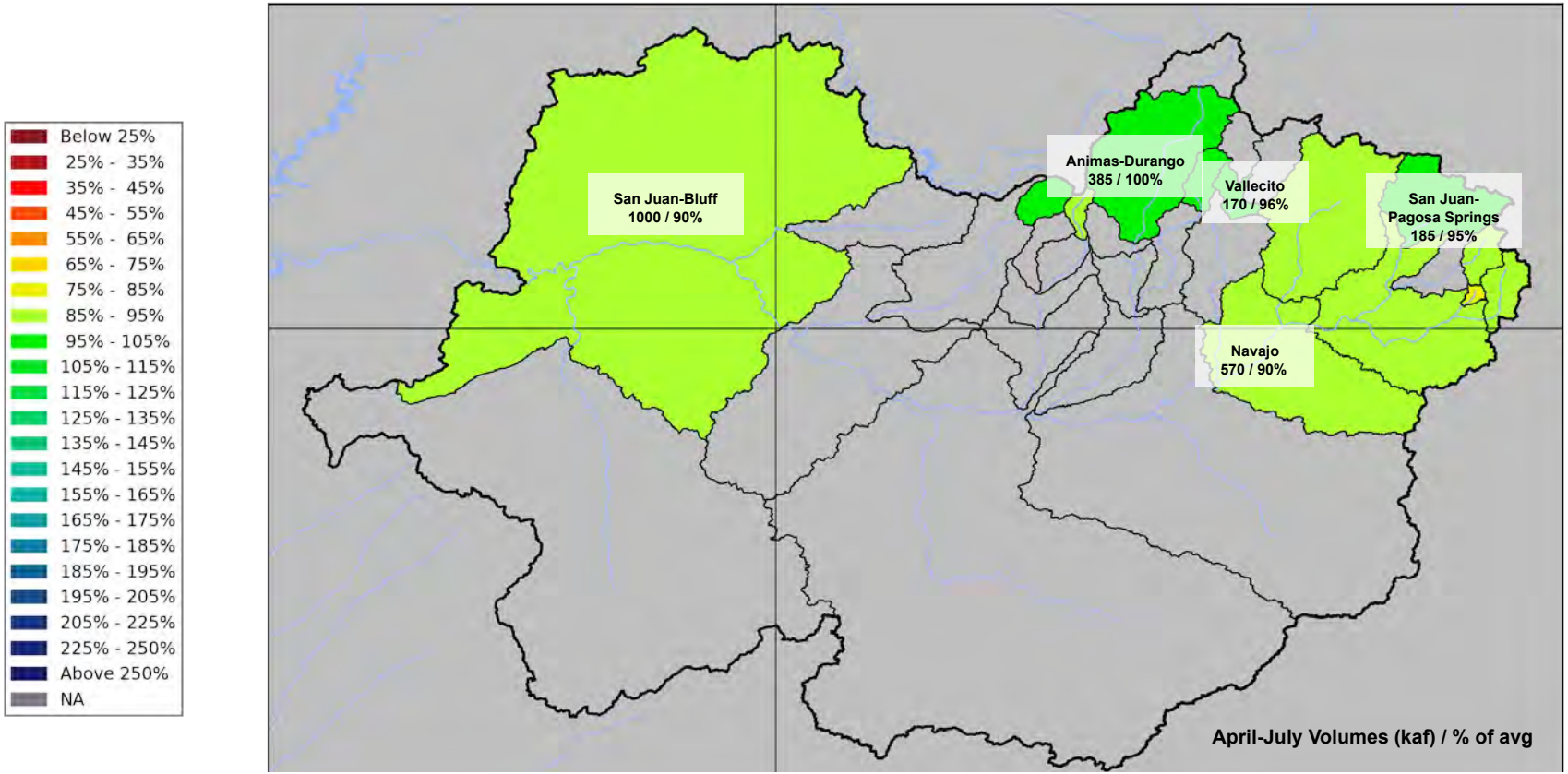
Forecast Ranges:

Gunnison: 90 - 110% of average
Dolores: 100 -105% of average

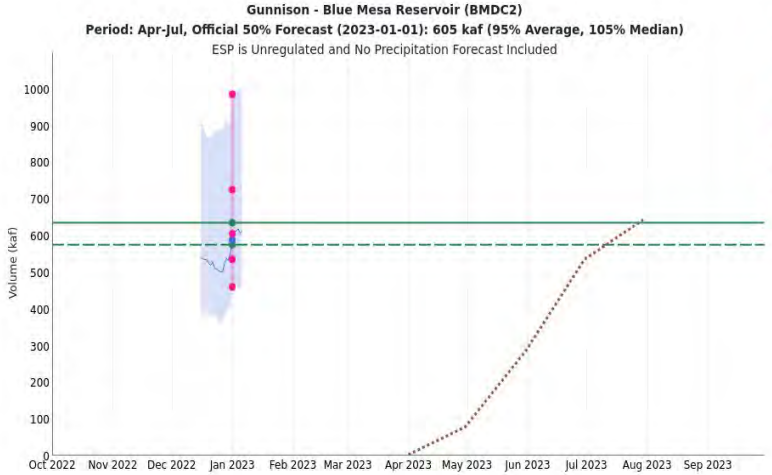


Jan 1st Water Supply Forecasts: San Juan

Forecast Range: 85 - 100% of average

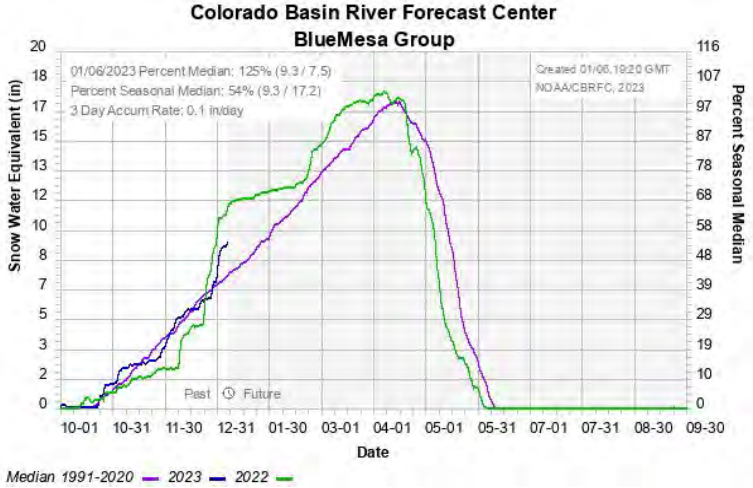


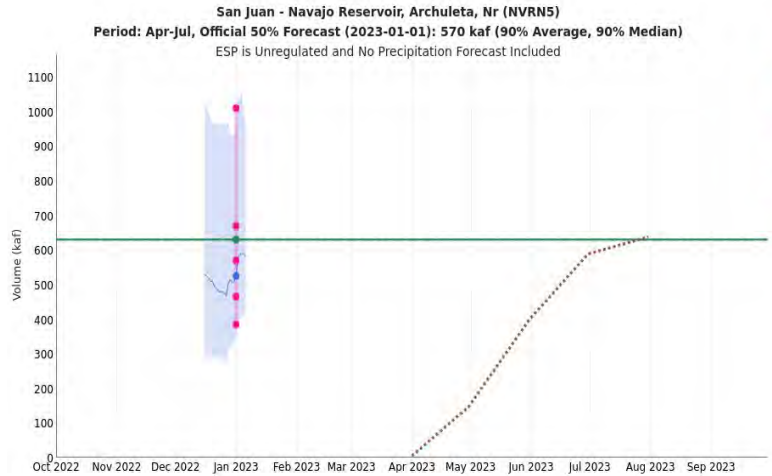
Southwest Colorado Water Supply Forecasts & Snow Conditions



2023/01/01:
Average: 635
Median: 575
ESP: 588
Official 10: 985
Official 30: 725
Official 50: 605
Official 70: 535
Official 90: 460

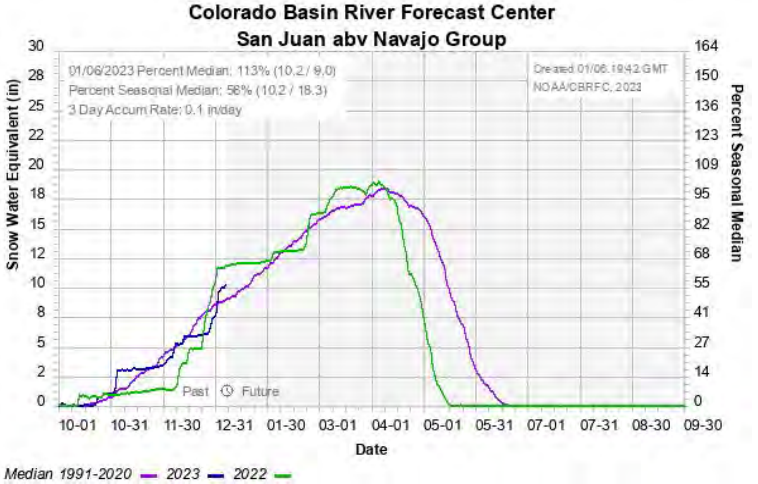
Blue Mesa Res Inflow
WY23 fcst: 605 kaf / 95%
WY22 obs: 431 kaf / 68%
WY21 obs: 316 kaf / 55%
WY20 obs: 387 kaf / 67%





2023/01/01:
Average: 630
Median: 630
ESP: 525
Official 10: 1010
Official 30: 670
Official 50: 570
Official 70: 465
Official 90: 385

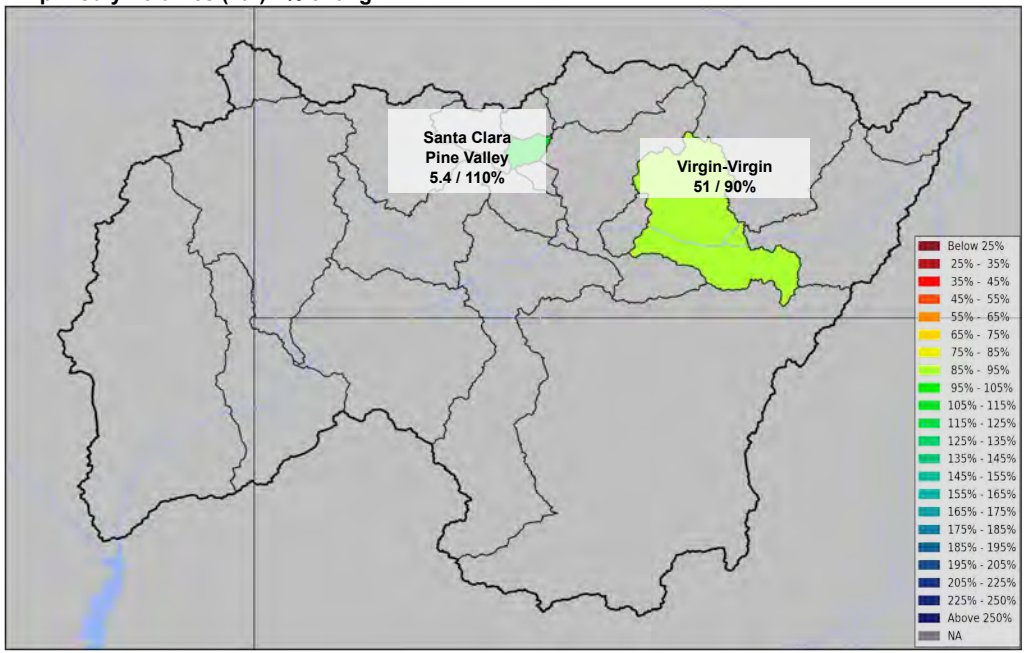
Navajo Res Inflow
WY23 fcst: 570 kaf / 90%
WY22 obs: 382 kaf / 61%
WY21 obs: 378 kaf / 60%
WY20 obs: 348 kaf / 55%

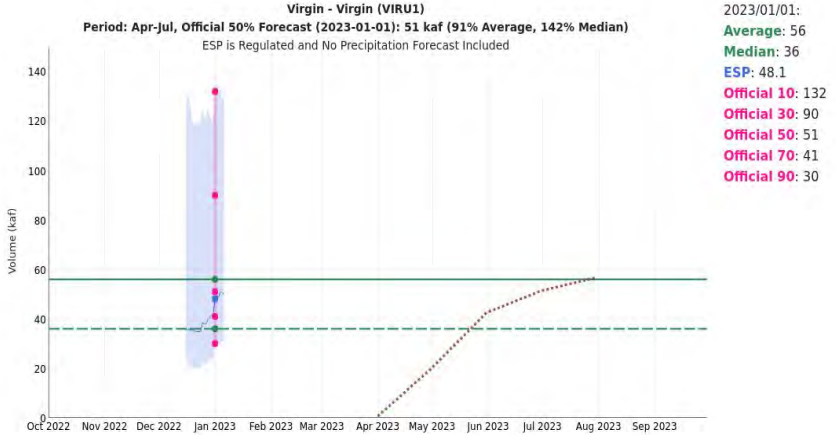


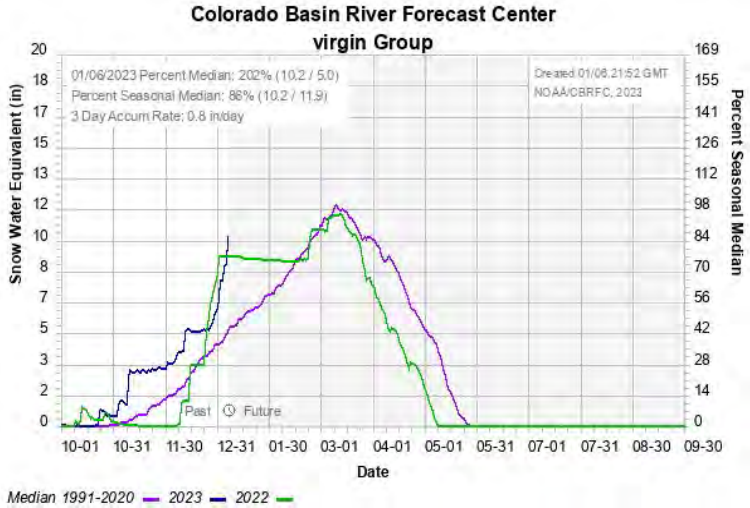
Jan 1st Water Supply Forecasts: Virgin River Basin

Forecast Range: 90 - 110% of average

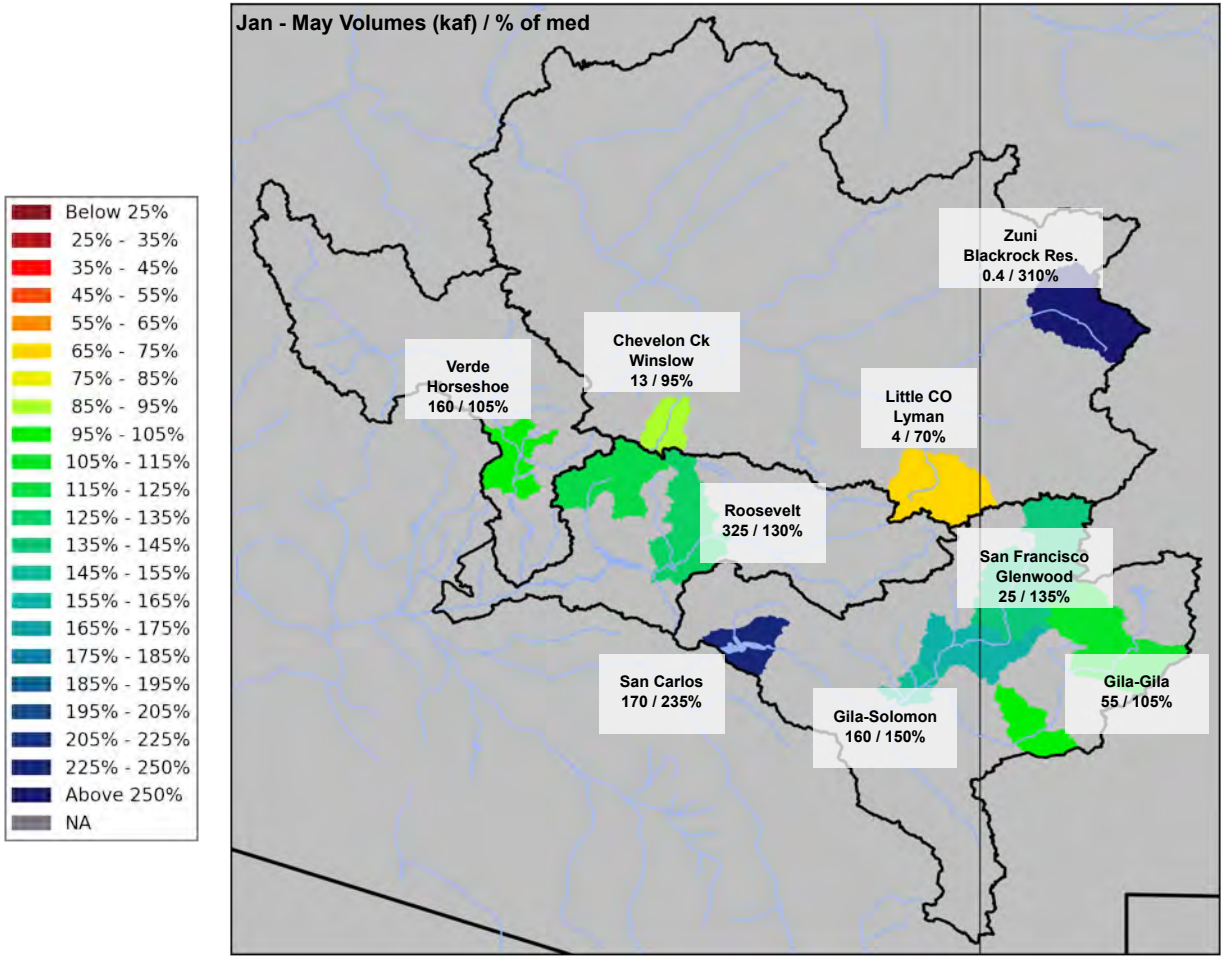
April-July Volumes (kaf) / % of avg







Jan 1st Water Supply Forecasts: Lower Colorado River Basin



January - May Forecast Period
% of 1991-2020 Median

Forecast Ranges

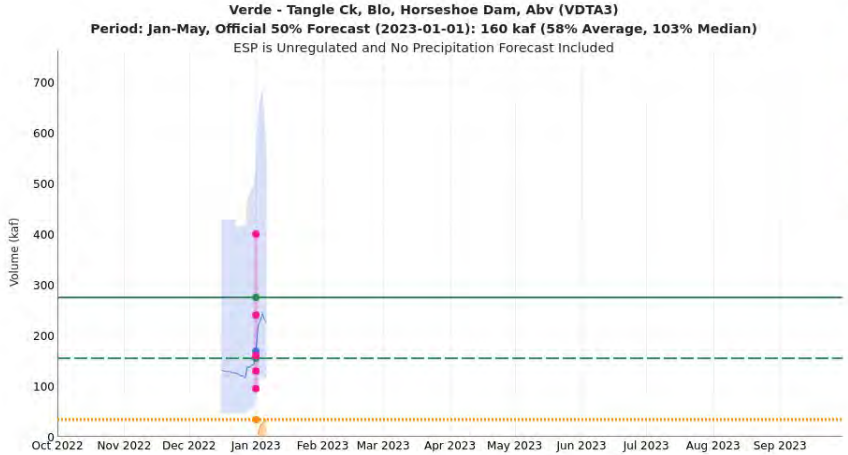
Little Colorado: 70% - 310%

Upper Gila: 100% - 235%

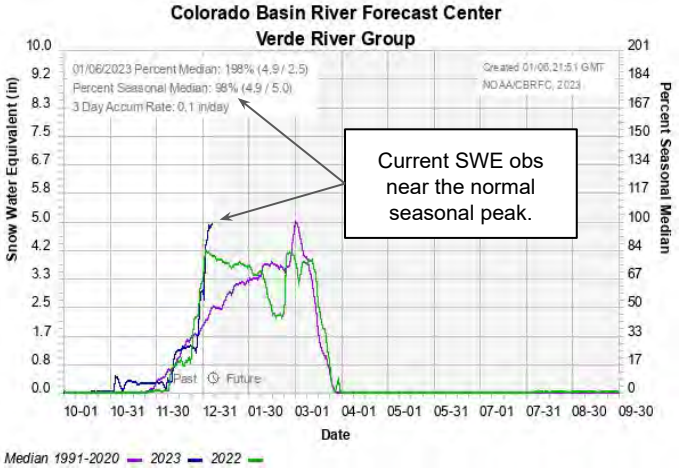
Salt: 120% - 130%

Verde: 105%

Lower Colorado Water Supply Forecasts & Snow Conditions



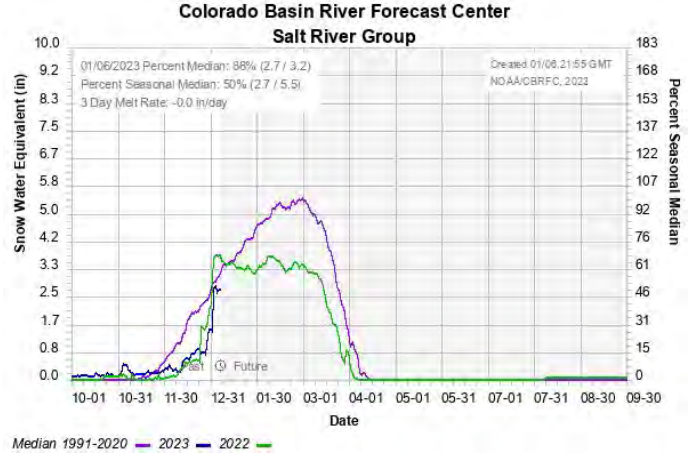
2023/01/01:
Average: 275
Median: 155
Observed Total: 33.9
ESP: 168
Official 10: 400
Official 30: 240
Official 50: 160
Official 70: 130
Official 90: 95



Current SWE obs near the normal seasonal peak.

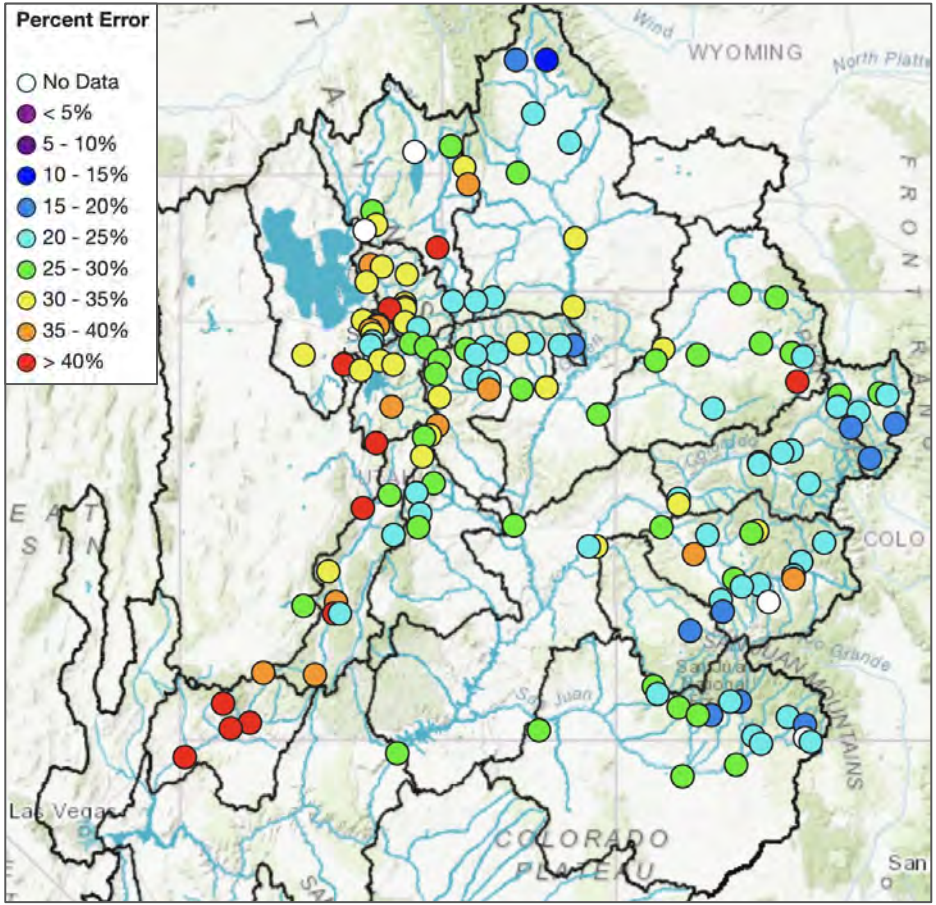
2023/01/01:
Average: 385
Median: 250
Observed Total: 52.7
ESP: 320
Official 10: 650
Official 30: 415
Official 50: 325
Official 70: 250
Official 90: 182

Jan-May forecast period; start showing accumulated volume on Jan 1st.



Historical Forecast Verification

January Forecast Error: April-July Volume



Location	Avg January Forecast Error
Green River - Warren Bridge	19%
Fontenelle Reservoir	28%
Yampa River - Deerlodge	28%
Blue River - Dillon Reservoir	19%
Colorado River - Cameo	21%
Blue Mesa Reservoir (Gunnison)	23%
McPhee Reservoir (Dolores)	25%
Navajo Reservoir (San Juan)	25%
Lake Powell	27%
Virgin River at Virgin	44%

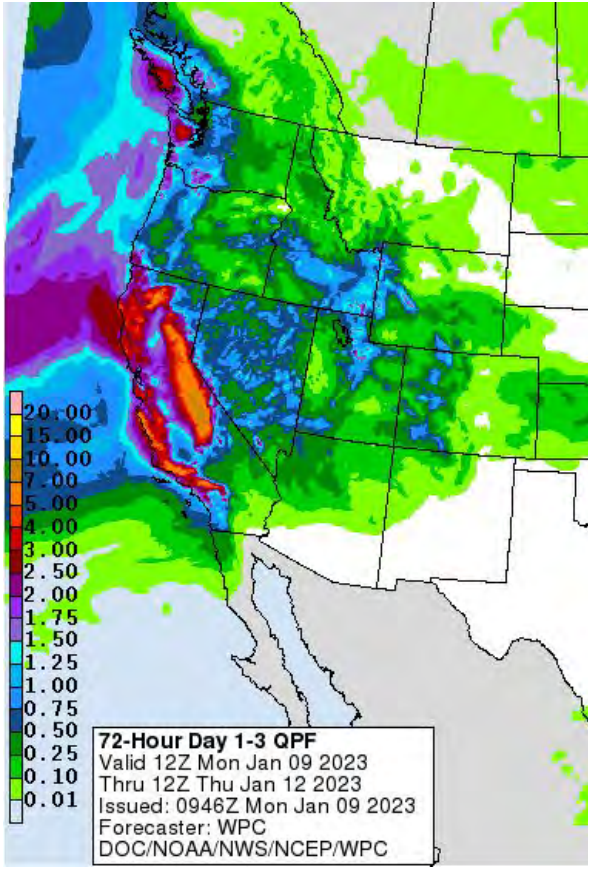
Error tends to decrease each month into the spring

Where Forecasts are Better:
- -Headwaters
- -Primarily snow melt basins
- -Known diversions / demands

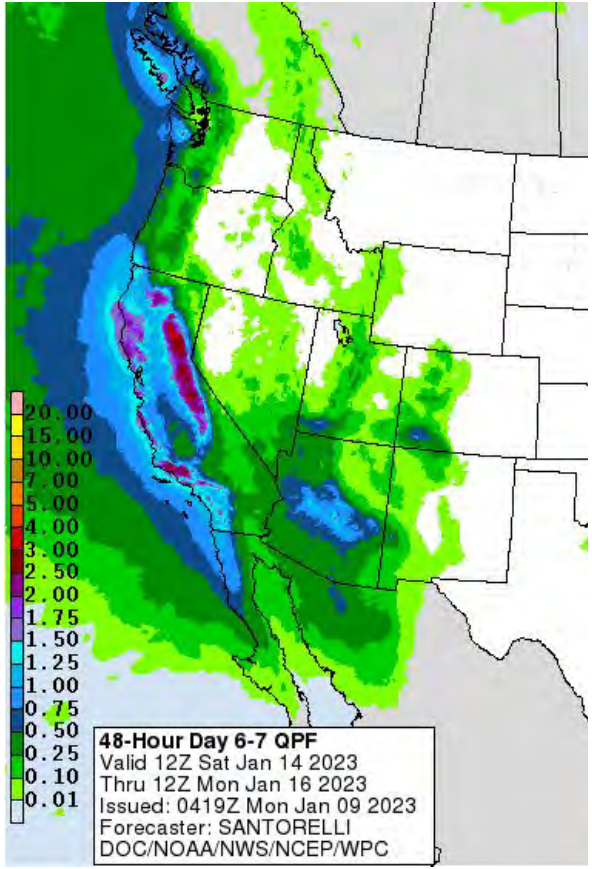
Where Forecasts are Worse:
- -Lower elevations (rain or early melt)
- -Downstream of diversions / irrigation
- -Little is known about diversions / demands

Future weather is the primary source of early season water supply forecast error/uncertainty.

Upcoming Weather: WPC January 9-16 Precipitation Outlook



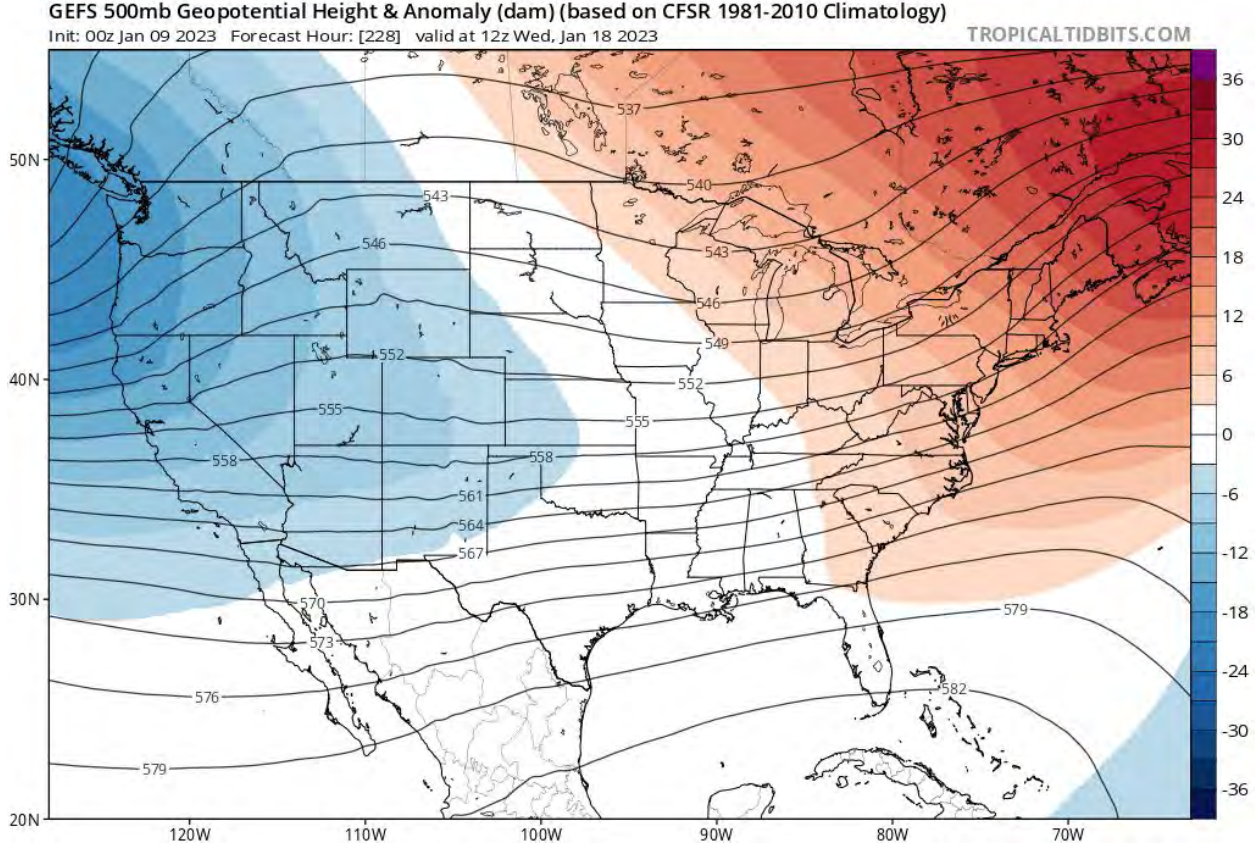
WPC QPF for days 1-3



WPC QPF for days 6-7

- A trough and associated atmospheric river will bring widespread precip to UT, CO, and northern AZ through Wednesday
  - Up to 0.50” for lower elevations, up to 1” or more for higher terrain
- Another system to bring precip to the region towards the end of the weekend
  - Weather model ensembles are split on a track that would favor the heaviest QPF in AZ vs UT/CO

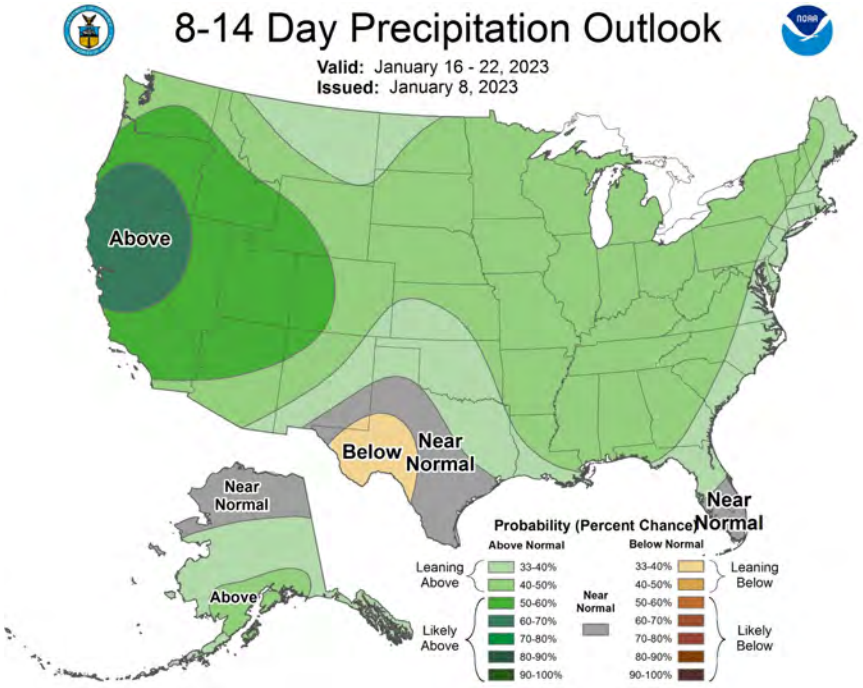
Upcoming Weather: January 16-20: Western Ridge and a Closed Low

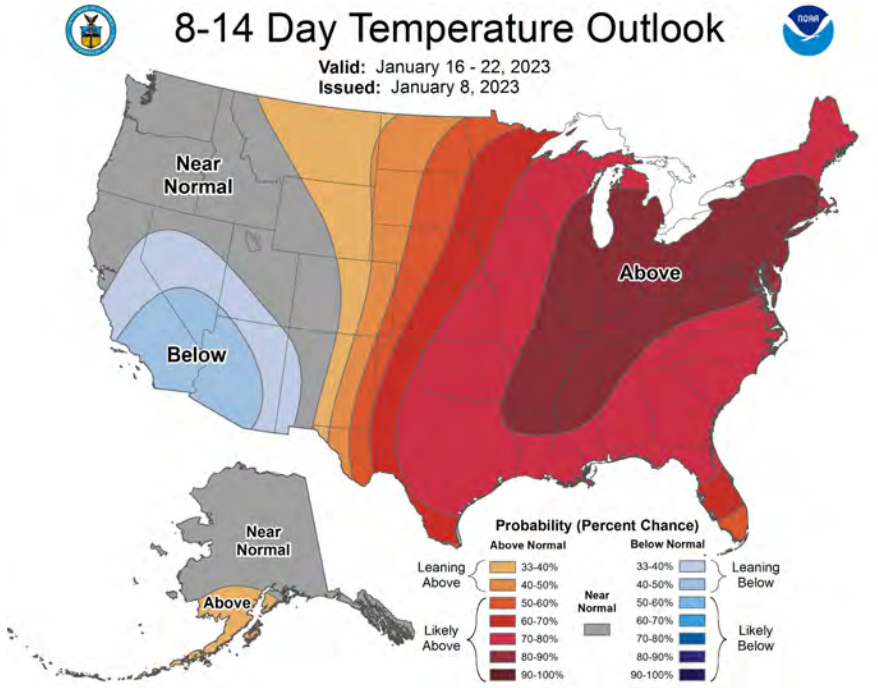


- The combination of eastern Pacific troughing and westerly flow over the US will keep the overall weather pattern active for the Colorado River Basin.
- Can expect wetter than average precipitation, and near average temperatures to continue.

Upcoming Weather: 8-14 Day Outlook (January 16-22)

Elevated odds of above average precipitation & near to below average temperatures.

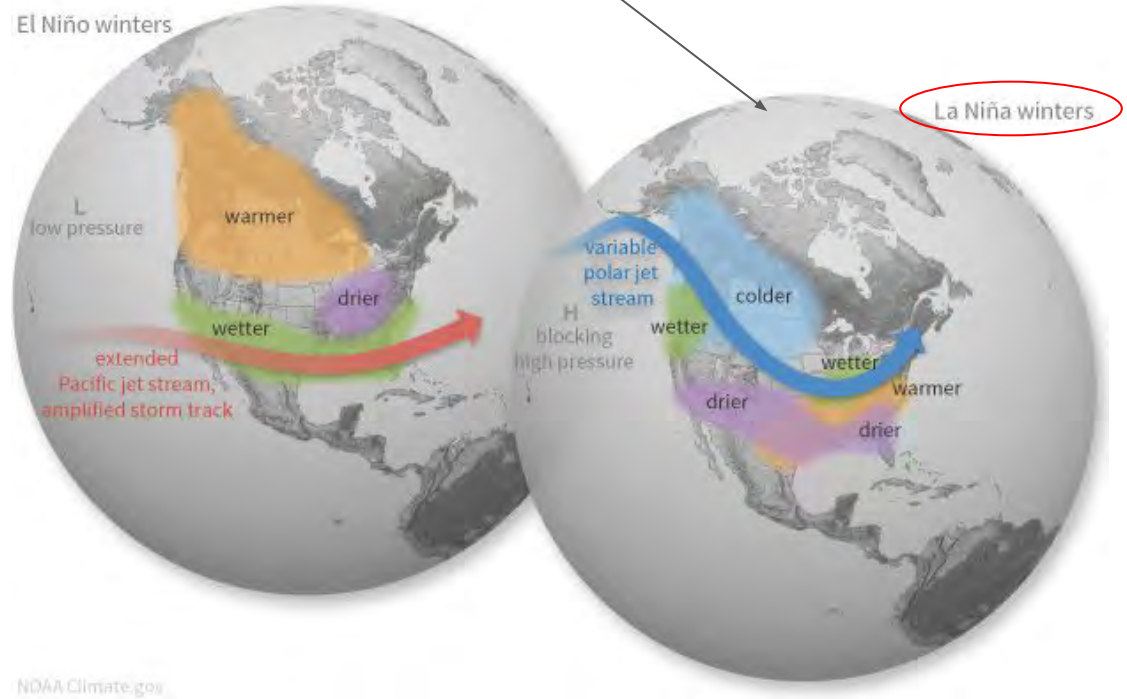


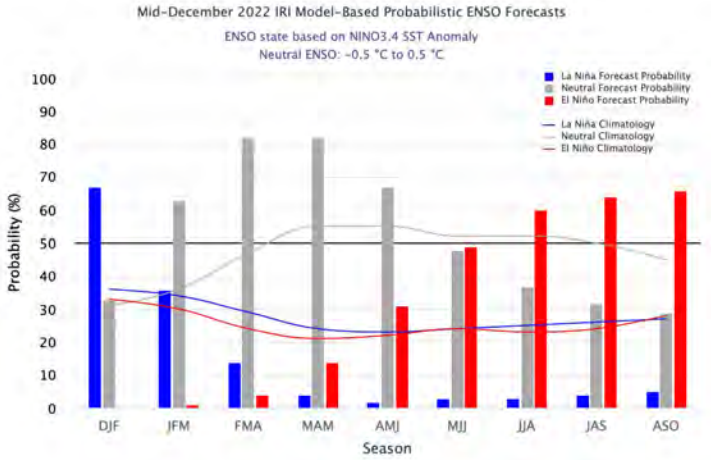


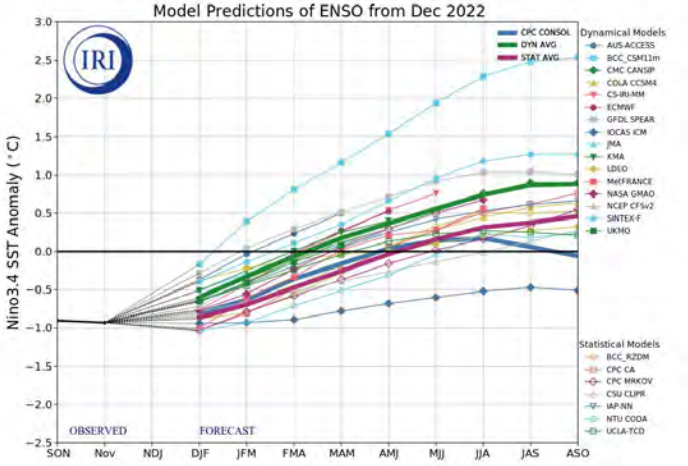
EL NIÑO/SOUTHERN OSCILLATION (ENSO)
DIAGNOSTIC DISCUSSION
issued by
CLIMATE PREDICTION CENTER/NCEP/NWS
8 December 2022

El Niño Southern Oscillation (ENSO) Status

- **La Niña** is expected to continue into the winter
  - Increased chances of drier winter weather in Arizona/LCRB
  - Much weaker correlation/winter weather signal elsewhere in basin
  - ~60% chance of ENSO-neutral during January-March 2023
  - ~80% chance of ENSO-neutral in February-May 2023





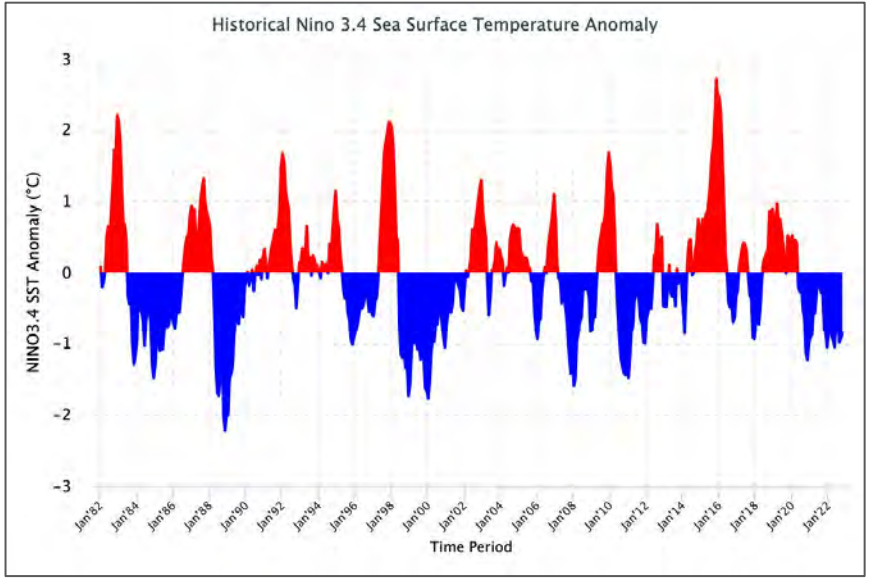


El Niño Southern Oscillation (ENSO) Status

PUBLISHED NOVEMBER 22, 2022

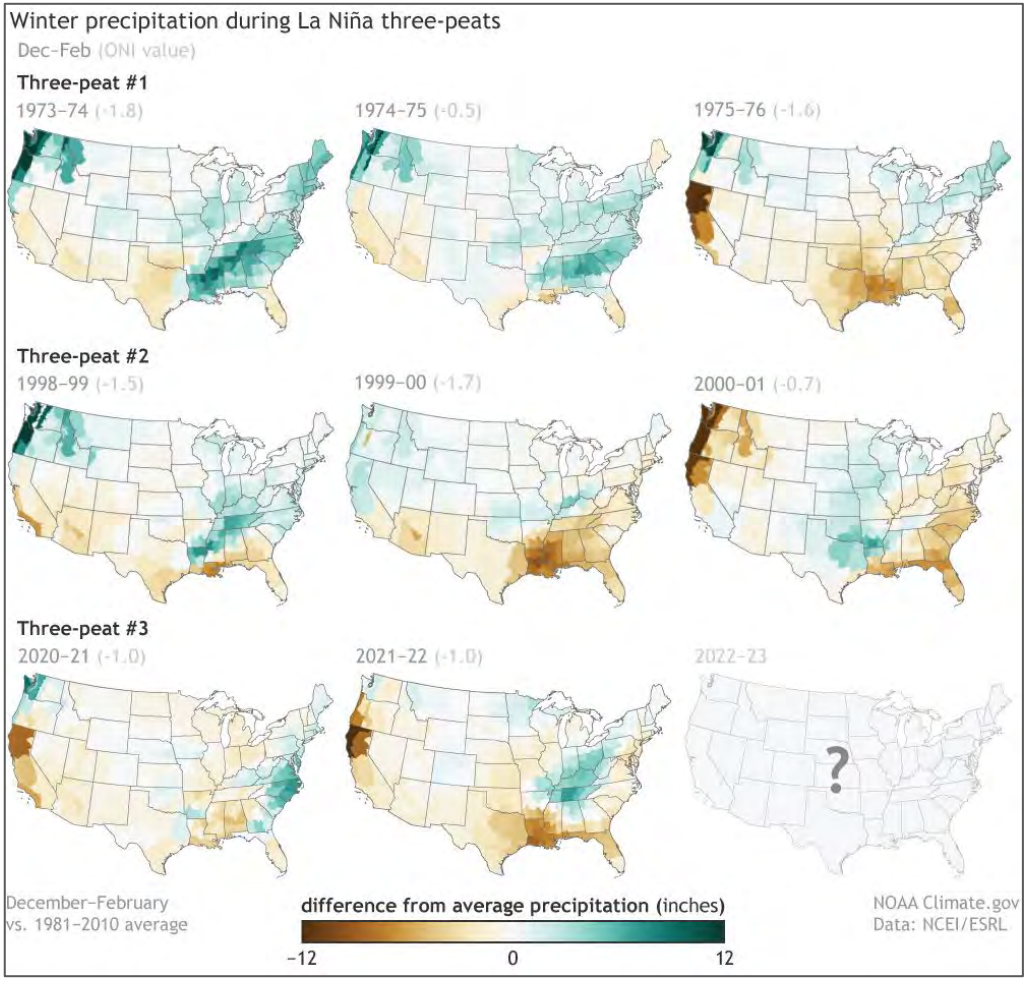
"With a 76% chance of La Niña through this winter, it's likely that we will have **a third La Niña winter in a row**, which would be only the third time since 1950 that this has occurred."

"..there is nothing obviously different about La Niña three-peats relative to all other La Niñas that would lead to markedly different expectations."



Climate.gov SCIENCE & INFORMATION FOR A CLIMATE SMART NATION

Data/Source Link



Summary

- CBRFC model soil moisture conditions are near to below normal across many of the major runoff producing areas across the UCRB, with variable soil moisture conditions across the LCRB.

- Current (Jan 8) CBRFC model SWE conditions are mostly above normal across the Colorado River Basin
  - Upper Colorado: 105-190%
  - Lower Colorado: 90-230%

- January 1 water supply forecasts (% of normal):
  - Upper Colorado: 85-150%
  - Lower Colorado: 95%-175%

- Weather outlook
  - Active weather is expected to continue for the next two weeks.

- Similarities to last year
  - Productive monsoon season, above normal December precip/Jan1 SWE, La Niña

2023 Water Supply Webinar Schedule

**All Times Mountain Time (MT)*

Colorado River Basin

Monday	Jan 9th	10 am
Tuesday	Feb 7th	10 am
Tuesday	Mar 7th	10 am
Friday	Apr 7th	10 am
Friday	May 5th	10 am

Utah/Great Basin

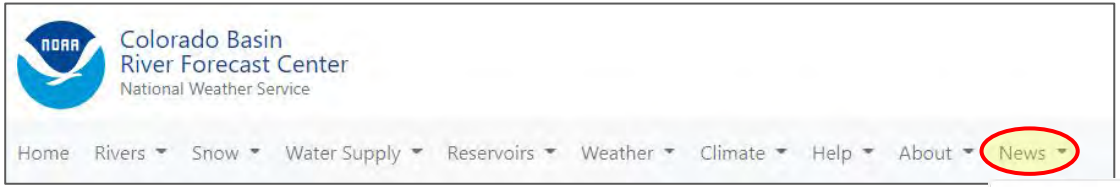
Monday	Jan 9th	11:30 am
Tuesday	Feb 7th	11:30 am
Tuesday	Mar 7th	11:30 am
Friday	Apr 7th	11:30 am
Friday	May 5th	11:30 am

Peak flow forecast webinar Monday, March 20th, 10 am MT

Additional briefings scheduled as needed

Webinar schedule & registration information has been posted to the CBRFC web page

CBRFC Webinar Registration & Email List



cbrfc.noaa.gov

CBRFC Water Supply Forecast Webinar Schedule & Registration - Water Year 2023

The Colorado Basin River Forecast Center (CBRFC) produces water supply forecasts for the Colorado River Basin and the eastern Great Basin.
CBRFC conducts December through May webinars explaining the forecasts and current conditions.

Follow the links below to register for a webinar.

Early Season Water Supply Outlook Webinar
Wednesday December 14 @ 10:00 am MT

Colorado River Basin Water Supply Webinars
Monday January 9 @ 10:00 am MT
Tuesday February 7 @ 10:00 am MT
Tuesday March 7 @ 10:00 am MT
Friday April 7 @ 10:00 am MT
Friday May 5 @ 10:00 am MT

Utah Water Supply Webinars
Monday January 9 @ 11:30 am MT
Tuesday February 7 @ 11:30 am MT
Tuesday March 7 @ 11:30 am MT
Friday April 7 @ 11:30 am MT
Friday May 5 @ 11:30 am MT

Peak Flow Webinar
Monday March 20 @ 10:00 am MT

A notification email will be sent if a date or time change occurs. Additional webinars are scheduled as needed.
The webinar slides will be available on the CBRFC presentations page soon after each briefing.

Email Updates

Available Email Lists

- General Stakeholders
- USBR Water Year and MTOM Forecasts
- Lake Mead Local Forecasts
- Green River Basin Forecasts
- Upper Colorado Mainstem Forecast
- San Juan, Gunnison and Dolores River Basins Forecasts
- Weber Basin PAO
- Special forecasts for the Dolores River Basin
- Special forecasts for the San Juan River Basin
- Special forecasts for CUWCD
- Utah reservoir forecasts
- CRFS
- Eastern Great Basin Water Supply
- Upper Basin Reclamation Reservoirs

Addition Requests

- Request to be on one of our lists by emailing cbrfc.webmasters@noaa.gov

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CBRFC Water Supply Presentations
https://www.cbrfc.noaa.gov/present/present.php