The Southwestern Water Conservation District

The West Building, 841 E Second Avenue

Durango, CO 81301

NOTICE IS HEREBY GIVEN FOR

SOUTHWESTERN WATER CONSERVATION DISTRICT'S

Regular Board Meeting

Location

The board meeting will be held virtually via Zoom.

Date and Time

12/12/24

Remote Connection

Click here to join via Zoom

Meeting ID: 835 9975 3537

Passcode: 474186

Phone Number: (346) 248 – 7799

To be recognized by the chair, please raise your hand. To raise your hand by phone, dial*9. To mute and unmute by phone, dial *6.

Other Details

Posted and Noticed Tuesday, December 10, 2024

Please email Mo Rock at morock@swwcd.org if you have difficulty attending the meeting.

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 meeting at the consensus of the Board.

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.

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

SWCD Regular Board Meeting Agenda
December 12, 2024 - DRAFT

THURSDAY, DECEMBER 12, 2024

1 Call to Order – Roll Call, Verification of Quorum

8:30 A.M.

2 Review and Approve Agenda

8:31 A.M.

3 Approve and/or Remove Consent Agenda Items

8:32 A.M.

4 Consent Agenda

8:35 P.M.

4.1 Acceptance of Treasurer's Report (September & October 2024)

5 Update on SWCD's Water Conservation and Infrastructure Partnership

8:36 A.M.

5.1 Update on B2E Grant Application
5.2 Update on B2W and Additional Grant Opportunites

6 FY2025 Budget Hearing and Adoption

9:00 A.M.

6.1 Discussion of Proposed FY2025 Budget, including any potential changes
6.2 Proposed 2025 Budget Message
6.3 FY2025 Budget Hearing and Public Comment
6.4 Resolutions to Adopt FY2025 Budget, Appropriate Sums of Money, and Set Mill Levy

Break

9:45 A.M.

7 Executive Session

10:00 A.M.

7.1 District Finance and Grant Funding
7.2 Colorado River Compact, Interstate and Intrastate negotiation matters, including re-negotiation of the interim guidelines
7.3 Proposed Changes to SWCD Personnel Leave Policies

8 Summary and Action Items from Executive Session

10:55 A.M.

9 Legislative Affairs

11:00 A.M.

9.1 Federal Affairs Update – Christine Arbogast
9.2 State Affairs Update - Garin Vorthmann

10 Staff Reports

11:30 A.M.

10.1 2024 Grant Extension Requests & Applications for 2025
10.2 General Manager Activities
10.3 Colorado River Update
10.4 Update on Auditing Services
10.5 Proposed Changes to SWCD Personnel Leave Policies
10.6 2025 SWCD Meeting and Holiday Schedule

Lunch Break

12:00 A.M

11 Contractor and Partner Updates

1:00 P.M.

11.1 Water Information Program Report - Elaine Chick
11.2 Harris Water Engineering - Carrie Padgett
11.3 Ute Mountain Ute Indian Tribe – Letisha Yazzie
11.4 Southern Ute Indian Tribe & Triannual Review of Water Quality Standards – Pete Nylander & Geoffrey Hensgen

12 Hydrology Update

1:20 P.M.

12.1 Hydrology and Other Updates for Divisions 4 & 7 from Division Engineers -Bob Hurford & Rob Genualdi
12.2 Water Quality – Pete Butler

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13 General Counsel Legal Report

1:40 P.M.

13.1 Update on Draft Division 7 Measurement Rules
13.2 Renewal of SWCD's Consulting Service Agreements
13.3 Monthly Water Court Resume Review

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14 Director's Updates and Concerns

1:50 P.M.

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15 Questions and/or Comments from the Public

2:05 P.M.

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16 Upcoming Meetings and Announcements

2:15 P.M

16.1	January 23	SWCD Legislative Call
16.2	January 29-31	Water Congress
16.3	February	SWCD Regular Board Meeting
16.4	March 28	SWCD Annual Seminar – Ignacio, CO
16.5	April 28-30	WaterSmart Workshop – Montrose, CO
16.6	2025	Joint Meeting with CRWCD?

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17 Adjournment

2:20 P.M.

5.0 Partnership Update

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 & Mo Rock**

Subject: **Update on SWCD Water Conservation and Infrastructure Partnership**

Date: **December 03, 2024**

This memorandum updates the SWCD board on the status of the SWCD Water Conservation and Infrastructure Partnership's (Partnership) application to the Bureau of Reclamation's Bucket 2E grant program and other Partnership happenings.

B2E

SWCD, Strategic by Nature, Theodore Conservation Partnership, and Harris Water Engineering are excited to share that SWCD's application had been submitted prior to the November 22nd deadline. Upon submittal, the application passed the 'red flag' check and moved to be reviewed. In total, SWCD is requesting $25,603,230 from the Bureau of Reclamation. Please see the attached summary of the application for specific details.

Partnership Meeting

Additionally, the partnership plans to host another partnership meeting in March of 2025 to update partners on lessons learned and hopefully start to prepare a B2W application. We'll also discuss other funding opportunities.

B2W

The announcement on the B2W grant ("durable water conservation projects") is still expected to be released. Still, it appears to be delayed due to ongoing discussions between the Bureau of Reclamation and the Upper Division States. We will share at the board meeting if updates were given the week before the board meeting at CRWUA.

SOUTHWESTERN WATER CONSERVATION DISTRICT'S
WATER CONSERVATION AND INFRASTRUCTURE PARTNERSHIP

Southwestern Water Conservation District's Upper Basin Environmental Drought Mitigation Application through their Water Conservation and Infrastructure Partnership

Project Summary Details

Background

SWCD's Water Conservation and Infrastructure Partnership (Partnership) is a robust collaboration led by SWCD and involves over 30 active entities throughout Southwest Colorado; this partnership focuses on increasing the capacity in Southwest Colorado by implementing a community navigator and bundling partner projects together to better access the unprecedented funding currently available.

On behalf of the partnership, SWCD is requesting B2E funding for a bundle of multi-benefit projects that restore ecosystems and habitats impacted by drought in southwestern Colorado. Project sites include the Dolores River, Yellowjacket Creek, Mancos River, Animas River, Uncompahgre River, and the San Juan River which are part of the Upper Colorado River Basin. Project work will include bank stabilization, invasive species removal, riparian and process-based restoration, fish passage and habitat connectivity, erosion control, and fen and wetland restoration. These projects were selected based on their impact, feasibility and readiness, and level of stakeholder/ community engagement in the region.

Overview

The total cost to complete the proposed work is estimated at $29,314,932 with $3,711,702 of non-federal support provided through grants and in-kind resources and technical assistance provided by project partners and stakeholders. SWCD is requesting $25,603,230 from the Bureau of Reclamation to complete the scope of work identified in the proposal.

In total, over 1,335 acres of riparian ecosystem will be restored, over 330 low-tech process-based restoration structures will be installed, restoration of 10 miles of river, over 200 miles of river will be connected, and 6 basins will receive funding to help mitigate drought.

The proposed project is supported by 37 different federal, state, and local agencies representing local and regional water agencies, environmental organizations, Tribal Councils, and other stakeholders.

Budget Details

Project Category	**Project Amount** BOR Request	**Match Amount**	**No. of Projects**	**Total Project Budget**
Invasive Removal	$5,996,918	$259,799	5	$6,226,717
Erosion Control and Low-Tech Process-Based Restoration	$5,996,735	$1,955,564	8	$7,952,299
Habitat Connectivity and Fish Passage	$11,321,011	$880,775	4	$12,192,786
SWCD In Direct Costs (10%)	$2,327,566	$615,564		
Totals	**$25,603,230**	**$3,711,702**	**17**	**$29,314,932**

Project Details

**Request Amount is the total BOR Project request including inflation contingency.*

ID	Project Name	Project Proponent	Priority Benefit	Basin	County	Request Amount*
Project Category: Invasive Removal						
1	Invasive Phreatophyte Control (Montezuma County)	Mancos Conservation District	Invasive removal	Mancos	Montezuma	$988,543
2	Invasive Phreatophyte Control (La Plata County)	Mountain Studies Institute	Invasive removal	Animas	La Plata	$622,669
3	Yellowjacket Creek Stream Restoration	Bureau of Land Management	Treat entire sub-basin for invasives, endangered fish downstream	McElmo	Montezuma	$1,237,511
4	Dolores River Restoration Partnership	RiversEdge West	Support 3 species agreement and downstream endangered fish	Dolores	Mesa, Montrose, San Miguel	$2,232,761
5	Invasive Phreatophyte Control	Ute Mountain Ute Tribe	Invasive removal	Mancos	Montezuma	$855,434
Project Category: Erosion Control and Low Tech Process-Based Restoration (LTPBR)						
6	Animas River Bank Stabilization	Animas Watershed Partnership	Bank stabilization	Animas	La Plata	$3,466,485
7	Beaver deceivers/flow devices in the Mancos Watershed	Mancos Conservation District	LTPBRs	Mancos	Montezuma	$35,406
8	Mancos Canyon Road Erosion Control	Ute Mountain Ute Tribe	LTPBRs	Mancos	Montezuma	$116,069
9	Mancos River System Restoration	Mancos Conservation District	LTPBRs	Mancos	Montezuma	$422,178
10	Ironton Park Restoration	Mountain Studies Institute	Fen restoration	Uncompahgre	Ouray	$931,962
11	Animas Headwaters Wetland and Stream Restoration	Mountain Studies Institute	Fen restoration	Animas	San Juan	$770,657

12	Snow Spur Creek Restoration	San Juan National Forest & National Forest Foundation	Colorado Cutthroat Trout	Dolores	Dolores	$49,500
13	Mancos Canyon Stream Restoration	Ute Mountain Ute Tribe	LTPBRs	Mancos	Montezuma	$204,478
Project Category: Habitat Connectivity and Fish Passage						
14	Park Ditch Diversion Restoration and Stream Restoration	Upper San Juan Watershed Enhancement Partnership	connectivity	San Juan	Archuleta	$2,239,552
15	Mancos River Improvements through the Town of Mancos	Mancos Conservation District	connectivity	Mancos	Montezuma	$403,934
16	Wines Ditch Diversion Restoration and Fish Passage	Colorado Parks and Wildlife	Support 3 species agreement and downstream endangered fish	Dolores	Mesa	$6,526,524
17	Webber Ditch Diversion Restoration and Fish Passage	Webber Ditch Company	connectivity	Mancos	Montezuma	$2,142,001

https://www.usbr.gov/uc/progat/SystemConservation/index.html

MENU

UPPER COLORADO BASIN

QUICK NAV

Current Focus | Program Overview | Contact

Current Focus

New funding opportunity open until Jan. 10, 2025

THE APPLICATION PERIOD FOR THE INITIAL UPPER BASIN ENVIRONMENTAL DROUGHT MITIGATION (B2E) PROGRAM CLOSED NOV. 22, 2024.

Environmental, Ecosystem, and Habitat Restoration with Water Savings Benefits Grant

Funding opportunities of the Upper Colorado River Basin System Conservation and Efficiency Program are made under the under the Inflation Reduction Act (IRA) which became Public Law 117-169 on August 16, 2022. Section 50233 of the Law provides funding to mitigate the impacts of drought with priority to the Colorado River Basin, and other basins experiencing comparable levels of drought.

The Phase 2 (Bucket 2) Upper Colorado River Basin Environmental Program or "B2E" funding opportunity under the Inflation Reduction Act closed the application period on November 22, 2024. The B2E funding opportunity targeted environmentally focused projects that mitigated the impacts of recent droughts.

A new funding announcement for projects that are environmentally oriented and also include water savings benefits will begin on Wed., Dec. 4, 2024. This new announcement is issued under the same Request for Applications (RFA) as the previous Bucket 2 Environmental Drought Mitigation Funding Opportunity and is referred to as "B2E2". B2E2 will provide funding for projects that will restore habitat and assist in species recovery while providing additional water savings benefits to increase resiliency against prolonged drought driven by climate change.

https://www.usbr.gov/uc/progat/SystemConservation/index.html

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Those who applied under the initial B2E funding opportunity do not need to submit another application. This new announcement provides a funding opportunity for environmentally oriented projects with additional water savings.

The Request for Applications under the title, "Upper Basin Environmental Drought Mitigation" opens Wed., Dec. 4, 2024, and will remain open until Fri., Jan. 10, 2025.

Funding is contingent upon completion of an evaluation process by Reclamation. Final selections will be made by Reclamation based on the merit review described in the attached Upper Basin Environmental Drought Mitigation Request for Application. Water savings benefits will not be a consideration in the merit review.

Phase one of the Upper Colorado River Basin System Conservation and Efficiency Program was funded through the System Conservation Pilot Program. The second phase is known as "Bucket 2." This funding opportunity is available.

INFORMATIONAL WEBINAR

Reclamation will host an informational public webinar on Wed., Dec. 11, 2024, at 11 a.m. MT.
Join from the meeting link: https://bor.webex.com/bor/j.php?MTID=m5203af48267faf7379c10edccd728eb2
+1-415-527-5035 United States Toll

How to Apply

Parties interested in applying for B2E2 funding should download the Request For Application (PDF document) and prepare an application package with the information outlined in Section D of the RFA. Once the application is complete applications should be submitted to UCBefficiency@usbr.gov.

https://www.usbr.gov/uc/progat/SystemConservation/index.html

Program Overview

Centre Pivot self-propelled irrigation system spraying a field at sunset June 8, 2023, 7 miles south of Farmington, New Mexico in the Navajo Agricultural Production Industry fields. They use the Navajo Indian Irrigation Project to water the crops. Reclamation photo

The Department of the Interior and the Bureau of Reclamation are committed to addressing the challenges of climate change in the Colorado River Basin by utilizing science-based, innovative strategies and working cooperatively with other federal agencies and diverse communities that rely on the Colorado River.

Prolonged drought and low runoff conditions have led to historically low water levels in Lakes Powell and Mead. As water levels continue to decline, action to improve and protect the long-term sustainability of the Colorado River System is imperative.

The Biden-Harris administration is making unprecedented investments in drought resilience and water management. President Biden's Bipartisan Infrastructure Law made a historic $8.3 billion investment to address water and drought challenges and invest in our nation's western water and power infrastructure, while rebuilding our existing projects to withstand a changing

hydrology. Additionally, the Inflation Reduction Act includes $4 billion in funding specifically for water management and conservation efforts in the Colorado River Basin and other areas experiencing similar levels of drought.

As part of the Department's commitment to address the drought crisis, the Upper and Lower Colorado River Basins are working with states, Tribes, and other water users to implement programs that will mitigate water conservation in the Basin.

Contact

For additional questions or information about the UCB System Conservation and Efficiency Program, please contact: ✉ UCBEfficiency@usbr.gov

Last Updated: 12/3/24

6.0 Budget Hearing

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 & Mo Rock**

Subject: **Agenda Item 10.06 – Budget Memo**

Date: **December 02, 2024**

Enclosed are several documents for next week's budget hearing. These include:

- Draft 2025 Budget Message
- Proposed 2025 Budget spreadsheet (including 2024 budget status): Cells highlighted in yellow reflect changes in the budget since the board's review at the November workshop.
- Suggested Board Motions for the Three Required Budget Resolutions
- Draft Budget Resolutions
    - Adopt the Budget
    - Appropriate Sums of Money
    - Set Mill Levy

2024 Budget Status

Although the financial books for 2024 are not yet finalized, SWCD should close out the year with between $400,000 and $500,000 of unexpended funds that were appropriated for the 2024 fiscal year. Unexpended funds were primarily in the grant program and general district administration categories. We exceeded our telecommunication line item by an estimated $8,237 (235%); this increase was largely due to switching website hosting services to Streamline and included a large set-up fee. Overall, the District will end 2024 with a total fund balance of approximately $5.8 million (assigned and unassigned).

Final numbers for the assignment to the Water Defense and Water Development funds will be presented to the Board at our February Board meeting.

Proposed 2025 Budget

Total projected revenues are similar to what was presented in the November 13th draft budget and are up approximately $159,500 from 2024. Although property values decreased (~$255,732,000) the district has seen this increase because of TABOR and the 5.5% rules and (2) an increase in investment income (~$50,000).

The proposed 2025 budget shows a positive year-end balance of nearly $200,000.

Proposed expenditures for 2025 are $2,026,993. Other than the Standard SWCD operating expenses, included in that figure is a $15,000 carryover in approved grants from 2023, continuing grant match funds for a CWCB grant ($50,000 local capacity grant), and pay raises for staff.

Remaining 2025 Process

The remaining budget process steps are outlined below:

- December Budget Hearing: The Board conducts a public hearing on the proposed budget. Following the public hearing, the board may revise the proposed budget in response to public comment and as otherwise allowed by state statute. The Board adopts the budget based on final assessed valuations and sets the mill levy based upon receipt of final assessed valuations from the nine counties. The Budget Officer certifies the mill levy to the County Commissioners by the statutory deadline (December 15).

- Prior to January 31: The Budget Officer files the budget, budget message, related resolutions, and mill levy certifications with DOLA prior to the deadline (January 31). SWCD's adopted budget is then publicly available on the DOLA Local Government Information System.

SOUTHWESTERN WATER CONSERVATION DISTRICT
FINAL DRAFT 2025 BUDGET MESSAGE

ABOUT SWCD

The Southwestern Water Conservation District ("SWCD") consists of all or part of nine counties in southwestern Colorado: Archuleta, Dolores, La Plata, Montezuma, San Juan, San Miguel, and parts of Hinsdale, Mineral, and Montrose counties. Each Board of County Commissioners appoints a representative to the SWCD Board of Directors. The board meets regularly, and the schedule (while subject to change) is available at swwcd.org.

SWCD was formed by the Colorado General Assembly on April 16, 1941 and charged with the conservation, use, and development of the water resources of the San Juan and Dolores rivers basins. SWCD is charged by statute (C.R.S. §37-47-101) to safeguard for Colorado all waters to which the state of Colorado is equitably entitled and has such powers as are necessary to carry out this mandate. Within SWCD's boundaries are the San Juan and Dolores River Basins, in which there are nine distinct watersheds.

Following this mandate, SWCD maintains a broad strategic role on behalf of its diverse constituents. SWCD advocates for southwestern Colorado's water interests at the local, state, regional, and federal level.

For more information about SWCD, please visit swwcd.org, call 970-247-1302, or email admin@swwcd.org. The SWCD office is located at 841 East Second Avenue in Durango, Colorado.

BRIEF BUDGET OVERVIEW

SWCD will provide the following services during the 2025 budget year: support the conservation, development and management of water use in southwestern Colorado; safeguard all waters to which the State is equitably entitled; participate in and provide funding for data collection; support, participate in, and lead local policy efforts; represent southwestern Colorado on federal and state policy concerns; and provide a variety of public education on water-related issues. Finally, SWCD will seek to serve constituents by providing general water information as requested. SWCD's strategic plan, adopted February 2022, is available at https://swwcd.org/our-strategic-plan/.

SWCD's accounting is performed on a modified accrual basis, consistent with generally accepted accounting practices. SWCD's financial statements are audited annually.

This budget reflects estimated revenues and proposed expenditures for 2025. For your reference and information, please find below a detailed description of the budget by line item.

BUDGET DETAIL: REVENUE

SWCD's total budgeted revenues for 2025 are projected to be $2,234,889.

Property Tax. SWCD is supported through a mill levy, which is assessed on property located within the District boundaries. Property tax revenues are expected to be approximately $1,829,540, based on a net mill levy of 0.380, which is the result after a temporary mill levy reduction of .027 mills for 2025. This revenue is based on a combined assessed net valuation across nine counties of $4,803,199,269.

Tax Increment Finance (TIF) Reimbursement. This line item tracks annual reimbursements of SWCD's portion of tax increments collected by urban rural authorities (URA) within the SWCD's boundaries. Currently, SWCD has agreements with the City of Durango to reimburse SWCD for SWCD's portion of the tax increment collected by the North Main Gateway URA and the Durango Midtown URA.

Specific Ownership Tax. This is a property or ad valorem tax levied in addition to sales (or use) taxes on a motor vehicle and is paid annually when the vehicle is registered within a county. SWCD receives a portion of these taxes collected by the nine counties.

Interest, PILT, and Other Tax Revenue. SWCD receives revenue from delinquent tax from prior years that has been recently collected, payment in lieu of tax (PILT), and other miscellaneous taxes.

Other Income. SWCD receives interest income and registration fees for SWCD's educational events. SWCD also receives income on behalf of the Water Information Program from its 30 partner entities and WIP event registration fees. SWCD also receives partner contributions to help support our streamgaging joint funding agreement with the U.S. Geological Survey.

TABOR Emergency Contingency Reserve. This line item is required by the TABOR amendment to the state constitution, which mandates that at least three percent of SWCD's fiscal year spending (excluding bonded debt service) be set aside as a contingency reserve for declared emergencies.

BUDGET DETAIL: EXPENDITURES

SWCD's total appropriation of money to the general fund is $2,026,993.

WATER SUPPLY – QUANTITY AND QUALITY

San Juan Recovery Program Water User Committee. This line item covers SWCD's 50% cost share for the cost of the two consultants, who participate in the broader San Juan River Basin Recovery Implementation Program (SJRBRIP) on behalf of water users in New Mexico and Colorado. This program works to recover the endangered Colorado pikeminnow and

razorback sucker populations in the San Juan River and its ongoing success protects water uses across the basin. Included in this line item is also the small contribution SWCD provides to the Colorado Water Congress in support of the Upper Colorado River Endangered Fish Recovery Program.

Weather Modification in SW Colorado. SWCD matches local partner commitments to winter cloud seeding, also known as weather modification.

Public Forums, Data Collection and Related Efforts.

- **Bonita Peak Community Advisory Group.** This line item supports operational costs for the Bonita Peak Mining District Community Advisory Group.
- **Center for Snow & Avalanche Studies.** This line item supports the Center for Snow & Avalanche Studies, which conducts valuable research on the impacts of dust on snow to runoff.
- **Stream Gaging/Federal.** This line item covers SWCD's cost share with the US Geological Survey for operation and maintenance of several regional stream gages. SWCD receives partial reimbursement from local partners for some of the stream gages.
- **Stream Gaging/Colorado.** This line item covers the cost for Colorado Division of Water Resources to operate their Cherry Creek and Long Hollow stream gages.
- **San Miguel Watershed Coalition.** This line item covers support for water quality studies and monitoring provided by the San Miguel Watershed Coalition.

Local Financial Support (Grants). This line item covers grants that may be awarded through SWCD's Grant Program to qualified entities that are carrying out projects consistent with SWCD's statutory purposes.

Previously Committed Local Financial Support (Grants). This line item covers any previously committed aid, approved in a prior year, for which the SWCD staff or board approves an extension through 2025.

WATER POLICY AND LEGISLATION

Federal.

- **Federal Lobbying Fees.** This line item covers fees related to federal lobbying efforts on behalf of SWCD.
- **Federal Lobbying Expenses.** This line item covers principally travel expenses related to federal lobbying efforts on behalf of SWCD.

State.

- **State Lobbying Fees.** This line item covers fees related to contracted state lobbying efforts on behalf of SWCD.
- **State Lobbying Expenses.** This line item covers principally travel expenses related to contracted state lobbying efforts on behalf of SWCD.

Dues & Memberships. This line item covers membership dues for organizations that provide benefits to SWCD and its constituents.

TECHNICAL SUPPORT

Legal.

- **Attorney Fees/General Counsel**. This line item covers attorney fees and legal costs for representation on general matters.
- **Attorney Travel Expenses/General Counsel.** This line item covers travel time and expenses for representation on general legal and litigation matters.
- **Litigation/General Counsel.** This line item covers attorney fees and legal costs for representation on litigation matters.
- **Attorney Fees/Special Counsel.** This line item covers fees for special legal counsel in various matters, including maintaining SWCD's water rights and on certain employment matters.
- **Attorney Expenses/Special Counsel.** This line item covers expenses for special legal counsel.

Engineering and Other Technical Services.

- **Engineering Fees/General.** This line item covers fees and expenses related to engineering activities.
- **Engineering Fees/Modeling.** This line item covers modeling efforts necessary to support and assess inter- and intrastate water administration scenarios.

Other Technical Services. This line item covers other contracted technical services (non-engineering) that may arise during the year, such as water quality support, other technical needs, as well as funding to be used as match requirement for grant applications to enhance District capacity.

WATER EDUCATION & OUTREACH

Other Event Sponsorships. This line item covers SWCD support for water-related events regionally and locally.

SWCD Children's Water Festival. This line item covers all costs related to SWCD's Annual Children's Water Festival, at which more than 700 fifth graders from across southwestern Colorado engage in educational programs for a full day at Fort Lewis College each May.

SWCD Southwest Water Seminar. This line item covers all costs related to SWCD's Annual Water Seminar, which nearly 300 people attend each year to hear from state and local water experts.

SWCD Water Leaders Program Scholarship. This line item allows SWCD to potentially support all or a portion of tuition for any professionals from southwestern Colorado accepted to the statewide Water Leaders Program.

Water Connections Event. This line item covers all costs related to SWCD's fall educational event, "Water Connections," which has been held with other sponsoring partners.

Water Education Colorado. This line item covers SWCD's support for the programming and content produced by Water Education Colorado, a statewide educational organization.

Watershed Education Program. This line item covers support for the Watershed Education Program, which provides water-related field trips throughout the year to elementary students in the Upper and Lower San Miguel basin.

WATER INFORMATION PROGRAM

This line item covers all program expenses related to operation of the Water Information Program (WIP), which is presently financially supported by 30 partners in southwestern Colorado, with a dollar-for-dollar match from SWCD for partner contributions. Also included are any revenue generated from sponsored events (e.g. "Water Law in a Nutshell"). WIP provides balanced water-related educational content and programming to our nine-county region. This line item includes the cost of the independent contractor who manages the Water Information Program. As noted under budgeted revenue, among the Water Information Program's revenue is an estimated $40,000 from local partners for 2025.

DISTRICT ADMINISTRATION

Board of Directors.

- **Director Fees.** The board members are eligible to receive $100 per day while engaged in SWCD business.
- **Director Travel.** This line item includes mileage, lodging, flights, meals, and any other travel costs incurred by board members while conducting SWCD business.

Staffing.

- **Wages – General Manager.** This line item covers wages for SWCD's general manager.
- **Wages – Programs Coordinator.** This line item covers wages for SWCD's programs coordinator.
- **Wages – Payroll Taxes.** This line item includes SWCD's payroll taxes for two employees.
- **Wages – Retirement Benefit.** This line item includes SWCD's retirement plan contributions for two employees. SWCD equally matches each employee's personal contributions to their retirement plan, up to 5% of their annual salary.
- **Wages – Health & Life Insurance.** This line item includes the maximum amount that SWCD will contribute towards the payment of certain health and life insurance premiums for SWCD's two employees and, in the case of health insurance, any qualified dependents.

Administrative Expenses.

- **Accounting.** This line item covers any costs related to SWCD accounting, such as accounting software or consultation with professional accountants.
- **The Payroll Department.** This line item covers SWCD's fees for using The Payroll Department to process payroll, payroll taxes, and process and distribute tax documents.
- **Audit.** This line item covers the cost of the annual audit of SWCD's financial statements, which is provided to the state by July 31 each year.
- **Capital Outlay.** This line item covers any purchases of items such as computers, other office equipment, or furniture.
- **Casual Labor.** This line item covers any one-time labor needs, such as movers or event support.
- **SDA Membership.** This line item covers SWCD's Special District Association (SDA) membership.
- **Insurance – General Liability.** This line item covers general liability insurance for SWCD, public officials' liability, excess liability, and SWCD's worker's compensation policy.
- **Legal Notice.** This line item includes SWCD's noticing of the budget hearing annually in local papers in each of the nine counties.
- **Meeting Expenses.** This line item covers all meals, venue costs, facilitation, and other meeting-related expenses. This line item also includes all costs related to coordination of the board's remote meeting and basin tour.
- **Miscellaneous Expenses.** This line items covers any expenses that do not clearly fall into another category, such as flowers for a hospitalized colleague or director.
- **Office Expenses.** This line item includes office supplies, consumable supplies, copy costs, software purchases, subscriptions, and other office-related needs.
- **Postage.** This line item covers postage costs for office mailings, principally board packets.
- **Registration Fees.** This line item covers conference, seminar or other event registration fees for board or staff.
- **Staff Training & Professional Development.** This line item covers the cost of courses or training for staff.
- **Telecommunications & IT Support.** This line item includes SWCD's phone, internet, teleconferencing, and website services.

Staff Travel. This line item reimburses staff for mileage, lodging, flights, meals, and any other travel costs incurred while conducting SWCD business.

Rent. This line item includes monthly rent for SWCD's current office space, related utilities, parking spaces, and storage.

County Treasurer Fees. This line item covers fees charged by the nine counties to collect and disburse property tax revenue on behalf of SWCD. Country Treasurer Fees are estimated at three percent of total tax revenue budgeted.

SWCD - Budget (Final Draft)	ADOPTED BUDGET 2023	ADOPTED BUDGET 2024	2024 Through October	2024 Through October as a %	Draft Budget 2025	NOTES FOR BOARD & STAFF
Beginning Fund Balance	4,493,502	4,986,893	5,041,375		**5,500,000**	
REVENUES						
Property Tax	1,646,892	1,755,449	1,646,118	94%	**1,829,540**	Net AV = $4,803,199,269; Net Mill=0.380
TIF Reimbursement	1,104	1,148	(1,000)	-87%	**1,200**	Durango North Main and Midtown URAs
Specific Ownership Tax	120,000	130,000	100,680	77%	**120,000**	
PILT & Other Tax Revenue	35,500	30,000	124,480	415%	**30,000**	
Other Income	102,550	203,015	205,113	101%	**254,149**	
Interest Earned	55,000	100,000	109,793	110%	**150,000**	Investment interest
Miscellaneous	0	0	0		**0**	
SWCD Event Registration	10,000	12,500	9,151	73%	**12,500**	Water Seminar
USGS Partner Contributions	-	45,080	45,080	100%	**44,914**	
Water Information Program - Partner Contributions	37,550	37,985	36,385	96%	**41,485**	
Water Information Program - Registration Income		7,000	4,335	62%	**5,000**	
Water Information Program - Income Interest		450	369	82%	**250**	
TOTAL REVENUES	**1,906,046**	**2,119,612**	**2,075,390**	**98%**	**2,234,889**	
TABOR Emergency Contingency Reserve	(56,980)	(61,954)			**(60,810)**	3% of total budgeted expenses
TOTAL RESOURCES	**6,342,568**	**7,044,551**	**7,116,765**		**7,674,079**	
EXPENDITURES						
Water Supply - Quantity & Quality	496,981	555,894	410,661	74%	**525,493**	
San Juan Recovery Program Water User Cmt	55,260	55,260	55,260	100.00%	**56,560**	Includes $1,300 for UCRIP via Water Congress
Weather Modification in SW Colorado	81,000	80,000	78,156	100.00%	**80,000**	
Public Forums, Data Collection and Related Efforts	80,721	123,634	87,087	100.00%	**123,933**	
Bonita Peak Community Advisory Group	5,000	5,000	5,000	100.00%	**5,000**	
Center for Snow & Avalanche Studies	7,000	7,000	7,000	100.00%	**7,000**	
Stream Gaging/Federal	53,081	101,994	72,632	71.21%	**102,293**	SWCD Contributions = $57,379
Stream Gaging/Colorado	2,640	2,640	2,455	92.98%	**2,640**	
San Miguel Watershed Coalition	13,000	7,000		0.00%	**7,000**	
Local Financial Support (Grants)	250,000	250,000	143,158	57.26%	**250,000**	
Previously Committed Local Financial Support (Grants)	30,000	47,000	47,000	100.00%	**15,000**	

SWCD - Budget (Final Draft)	ADOPTED BUDGET 2023	ADOPTED BUDGET 2024	2024 Through October	2024 Through October as a %	Draft Budget 2025	NOTES FOR BOARD & STAFF
Water Policy & Legislation	101,600	100,318	86,371	86%	**97,878**	
Federal	55,500	55,500	50,374	90.76%	**55,500**	
Lobbying Fees	50,000	50,000	50,000	100.00%	**50,000**	
Lobbying Expenses	5,500	5,500	374	6.80%	**5,500**	
State	23,600	24,218	17,682	73.01%	**25,278**	
Lobbying Fees	20,600	21,218	17,682	83.33%	**22,278**	
Lobbying Expenses	3,000	3,000			**3,000**	
Dues & Memberships	22,500	20,600	18,315	88.91%	**17,100**	
Club 20	300	300		0.00%	**300**	
Colorado River Water Users Association	200	-			**-**	
Colorado Water Congress	11,000	10,000	8,015	80.15%	**6,500**	
Ditch & Reservoir Company Alliance	500	500	500	100.00%	**500**	
Family Farm Alliance	10,000	9,300	9,300	100.00%	**9,300**	
Four Corners Farmers & Ranchers Coalition	500	500	500	100.00%	**500**	
Professional Support	700,000	775,000	324,657	42%	**750,000**	
Legal	400,000	400,000	184,774	46.19%	**350,000**	
Attorney Fees/General Counsel	300,000	300,000	114,122	38.04%	**225,000**	
Attorney Travel Exps/General Counsel	20,000	20,000	19,020	95.10%	**20,000**	
Litigation/General Counsel	50,000	50,000	51,632	103.26%	**50,000**	
Attorney Fees/Special Counsel	25,000	25,000			**50,000**	
Attorney Exps/Special Counsel	5,000	5,000			**5,000**	
Engineering	225,000	225,000	131,123	58.28%	**250,000**	
Engineering Fees/General	150,000	175,000	116,546	66.60%	**200,000**	
Engineering Fees/Modeling	75,000	50,000	14,577	29.15%	**50,000**	
Other Technical Services	75,000	150,000	8,760	5.84%	**150,000**	
Technical Support	75,000	50,000			**50,000**	e.g. water quality and other technical support
CWCB Local Capacity Grant (Community Navigator) Match		50,000	8,760	17.52%	**50,000**	Match Funds #2 for CWCB Community Navigator Grant
Matching Funds		50,000			**50,000**	

SWCD - Budget (Final Draft)	ADOPTED BUDGET 2023	ADOPTED BUDGET 2024	2024 Through October	2024 Through October as a %	Draft Budget 2025	NOTES FOR BOARD & STAFF
Water Education & Outreach	67,000	74,750	46,434	62%	**74,250**	
Event Sponsorships (≤ $1,000 GM discretion; > $1,000 needs Board approval)	6,000	6,000	2,318	38.63%	**5,000**	
SWCD Children's Water Festival	10,500	10,500	3,010	28.66%	**10,000**	
SWCD Southwest Water Seminar	28,000	35,000	23,857	68.16%	**36,000**	Estimated revenues of $12,500 (see line 15)
SWCD Water Leaders Program Scholarship	4,500	4,750	4,750	100.00%	**4,750**	
Water Connections Event	2,000	2,500	2,500	100.00%	**2,500**	
Water Education Colorado	10,000	10,000	10,000	100.00%	**10,000**	
Watershed Education Program (Telluride Institute)	6,000	6,000			**6,000**	
Water Information Program	80,110	82,150			**85,460**	SWCD Contribution = $41,485
District Adminstration	399,530	419,520	335,059	80%	**434,490**	
Board of Directors	35,000	30,000	12,694	42.31%	**30,000**	
Director Fees	20,000	15,000	6,659	44.40%	**15,000**	
Director Travel	15,000	15,000	6,035	40.23%	**15,000**	
Staffing	245,950	263,050	224,036	85.17%	**270,061**	
Wages - General Manager	130,000	145,000	127,981	88.26%	**149,350**	Reccommended Increase of 3% based on Personnel Committee
Wages - Programs Coordinator	60,000	60,000	53,192	88.65%	**61,800**	Recommended Increase of 3% based on Personnel Committee
Wages - Payroll Taxes	17,100	18,450	14,554	78.88%	**19,004**	
Wages - Retirement Benefit	9,500	10,250	7,942	77.49%	**10,558**	5% employer match
Wages - Health & Life Insurance	29,350	29,350	20,366	69.39%	**29,350**	Up to $1200/mo/empl + life insurance
Recruitment						

SWCD - Budget (Final Draft)	ADOPTED BUDGET 2023	ADOPTED BUDGET 2024	2024 Through October	2024 Through October as a %	Draft Budget 2025	NOTES FOR BOARD & STAFF
Administrative Expenses	65,900	67,970	58,115	85.50%	**74,929**	
Accounting	5,000	5,000	2,920	58.40%	**5,000**	
Payroll Department Fees		3,000	2,585	86.17%	**3,000**	
Audit	10,000	10,500	9,000	85.71%	**10,500**	
Capital Outlay	5,000	5,000			**5,000**	
Casual Labor	200	200			**200**	
SDA Membership	1,500	1,500	1,238	82.50%	**1,500**	
Equipment Leasing	-	-			**-**	
Insurance - General Liability	8,500	8,750	8,876	101.44%	**9,709**	updated from 9,000 based on new 2025 numbers
Legal Notice	200	520	40	7.67%	**520**	
Meeting Expenses	7,500	7,500	6,184	82.46%	**7,500**	
Miscellaneous Expenses	500	500	86	17.27%	**500**	
Office Expenses	7,000	7,000	4,154	59.34%	**7,000**	
Postage	2,500	2,500	964	38.58%	**2,000**	
Registration Fees	8,000	10,000	9,163	91.63%	**10,000**	
Staff Training & Professional Development	2,500	2,500	1,168	46.74%	**2,500**	
Telecommunications/IT Support	7,500	3,500	11,737	335.33%	**10,000**	Includes new laptop for Programs Coordinator
Staff Travel	20,000	25,000	10,661	42.64%	**25,000**	
Rent	32,680	33,500	29,553	88.22%	**34,500**	
County Treasurer Fees	54,105	57,498	50,284	87%	**59,422**	
SWCD Contingency Reserve	0	0				
TOTAL EXPENDITURES (TOTAL APPROPRIATED FUNDS)	**$1,899,326**	**$2,065,130**	**$1,253,465**		**$2,026,993**	
Excess Revenue Over (Under) Expenditures	**$6,720**	**$54,482**	**$821,925**		**$207,896**	
ENDING FUND BALANCE	**$4,500,222**	**$5,041,375**	**$5,863,300**		**$5,707,896**	

Suggested SWCD Budget Motions:

Adopt the Budget

Option 1: Move to approve Resolution 2024-05 to adopt the 2025 budget as proposed.

OR

Option 2: Move to approve Resolution 2024-05 to adopt the 2025 budget with the adjustments made by the board at today's meeting, which are more specifically: _____.

Appropriate Sums of Money

Option 1: Move to approve Resolution 2024-06 to appropriate funds in the amount of $2,026,993 to be spent in 2025.

OR

Option 2: Move to approve Resolution 2024-06 to appropriate funds in the amount of $_____ to be spent in 2025, as adjusted at today's meeting.

Set Mill Levy

Move to approve Resolution 2024-07 to approve a temporary mill levy reduction of .027 mills and to certify a net mill levy of 0.380 on the assessed valuation of $4,803,199,269 (four billion, 199 million, 269 thousand, 269 dollars) to generate revenue of $1,829,540 in 2024.

SOUTHWESTERN WATER CONSERVATION DISTRICT
RESOLUTION 2024-05 TO ADOPT BUDGET
(Pursuant to 29-1-108, C.R.S)

A RESOLUTION SUMMARIZING EXPENDITURES AND REVENUES FOR THE GENERAL FUND AND ADOPTING A BUDGET FOR THE SOUTHWESTERN WATER CONSERVATION DISTRICT FOR THE CALENDAR YEAR BEGINNING ON THE FIRST DAY OF JANUARY 2025 AND ENDING ON THE LAST DAY OF DECEMBER 2025.

WHEREAS, the Board of Directors of Southwestern Water Conservation District has appointed General Manager Steve Wolff as Budget Officer to prepare and submit a proposed budget to said governing body at the proper time; and

WHEREAS, General Manager Steve Wolff has submitted a proposed budget to this governing body on October 10, 2024, for its consideration; and

WHEREAS, upon due and proper notice, published or posted in accordance with the law, said proposed budget was open for inspection by the public at a designated place, a public hearing was held on December 12, 2024, and interested electors were given the opportunity to file or register any objections to said proposed budget; and

WHEREAS, whatever increases may have been made in the expenditures, like increases were added to the revenues or planned to be expended from reserves/fund balances so that the budget remains in balance, as required by law.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF SOUTHWESTERN WATER CONSERVATION DISTRICT, COLORADO:

Section 1. That the budget as submitted, amended, and summarized by fund, hereby is approved and adopted as the budget of the Southwestern Water Conservation District for the year stated above.

Section 2. That the budget hereby approved and adopted shall be conveyed by way of a transmittal letter signed by the General Manager and made a part of the public records of the Southwestern Water Conservation District.

ADOPTED, THIS 12TH DAY OF DECEMBER 2024

_____
Jenny Russell, President

Attest: _____
Charles Smith, Secretary-Treasurer

SOUTHWESTERN WATER CONSERVATION DISTRICT
RESOLUTION 2024-06 TO APPROPRIATE SUMS OF MONEY
(Pursuant to Section 29-1-108, C.R.S.)

A RESOLUTION APPROPRIATING SUMS OF MONEY TO THE GENERAL FUND OF THE SOUTHWESTERN WATER CONSERVATION DISTRICT, COLORADO IN THE AMOUNT AND FOR THE PURPOSES SET FORTH BELOW FOR THE 2025 BUDGET YEAR:

WHEREAS, the Board of Directors of the Southwestern Water Conservation District adopted the annual budget in accordance with the Local Government Budget Law on December 12, 2024; and

WHEREAS, the Board of Directors has made provision therein for revenues in an amount equal to or greater than the total proposed expenditures as set forth in said budget; and

WHEREAS, it is not only required by law, but also necessary to appropriate the revenues and reserves or fund balances provided in the budget to and for the purposes described below, thereby establishing a limitation on expenditures for the operations of the Southwestern Water Conservation District.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SOUTHWESTERN WATER CONSERVATION DISTRICT, COLORADO,

Section 1. That the following sums are hereby appropriated from the revenue of each fund, to each fund, for purposes stated:

TOTAL GENERAL FUND $2,026,993

ADOPTED THIS 12TH DAY OF DECEMBER 2024

_____
Jenny Russell, President

Attest: _____
Charles Smith, Secretary-Treasurer

SOUTHWESTERN WATER CONSERVATION DISTRICT
RESOLUTION 2024-07 TO SET MILL LEVIES
(Pursuant to 39-5-128, C.R.S. and 39-1-111, C.R.S.)

A RESOLUTION LEVYING PROPERTY TAXES FOR THE YEAR 2024 TO HELP DEFRAY THE COSTS OF GOVERNMENT FOR THE SOUTHWESTERN WATER CONSERVATION DISTRICT, COLORADO, FOR THE 2025 BUDGET YEAR.

WHEREAS, the Board of Directors of Southwestern Water Conservation District, has adopted the annual budget in accordance with the Local Government Budget Law, on December 12, 2024; and

WHEREAS, the amount of money necessary to balance the budget for general operating purposes from property tax revenue is $1,829,540; and

WHEREAS, the 2024 valuation for assessment for the Southwestern Water Conservation District as certified by the County Assessors is $4,803,199,269.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF SOUTHWESTERN WATER CONSERVATION DISTRICT, COLORADO.

Section 1. That for the purpose of meeting all general operating expenses of the Southwestern Water Conservation District during the 2025 budget year, there is hereby levied a net tax of 0.380 mills upon each dollar of the total valuation for assessment of all taxable property within the Southwestern Water Conservation District for the year 2024.

Section 2. The District's intent is to impose a mill levy of .407 mills, but in order to comply with the revenue limitations of TABOR, the District is adopting a temporary mill levy credit of 0.027 mills, resulting in a net assessed mill levy of 0.380 mills for the 2025 budget year.

Section 3. That Steve Wolff, General Manager, is hereby authorized and directed to immediately certify to the County Commissioners of Archuleta, Dolores, Hinsdale, La Plata, Mineral, Montezuma, Montrose, San Juan and San Miguel Counties, Colorado, the mill levy for the Southwestern Water Conservation District as hereinabove determined and set.

ADOPTED THIS 12TH DAY OF DECEMBER 2024

_____
Jenny Russell, President

Attest: _____
Charles Smith, Secretary-Treasurer

9.0 Legislative Updates

COLORADO LEGISLATIVE STRATEGIES
moving mountains since 1980

2025 Legislative Preview – December 12, 2024

State Budget

The Joint Budget Committee (JBC) has begun the annual process of writing the state budget. The Governor presented his budget proposal in early November and the JBC has started holding briefings with each department to get more details about the priorities from each department. The state is facing an almost $1 billion deficit, and everyone is preparing for a very tough budget year. The Governor's proposal identified about $640 million in potential cuts to programs across the spectrum, but more will have to be identified to pass a balanced budget.

Focusing on water, it appears that the potential outcome could be mixed. The Department of Natural Resources is recommending significant changes to how severance tax revenues are distributed, including how much of a reserve the Severance Tax Operational Fund is required to hold. For background, the Joint Budget Committee passed a bill in 2021 that required the Severance Tax Operational Fund to have a 200% reserve. This was done to provide more stability to the programs that are funded through severance tax, which is a very volatile funding source that can experience wild swings in revenue generation from year to year. The administration is recommending that the reserve to reduced by half, but the JBC has expressed skepticism that is a wise move to make. It is expected that the reserve will be reduced but to what extent is still up for debate.

Other budget recommendations include:

- JBC staff provided an analysis of the DNR budget request and identified 5 major impacts:
    - The request would change the severance tax revenue distribution formula to allocate more funds to the Perpetual Base Fund and fewer to the Severance Tax Operational Fund over the three fiscal years that are impacted.
    - The request would capture the spillovers from the Operational Fund into the General Fund instead of those spillovers going to the Perpetual Base Fund. These captures would take place in all three years that the request impacts. There is an additional capture in the form of a transfer from the Perpetual Base Fund to the General Fund of dollars that have already spilled into the Perpetual Base Fund.
    - The request would move funding of several core and discretionary Op Fund programs to the General Fund, including: the Colorado Geological Survey; the Avalanche Information Center; the Species Conservation Trust Fund; the Soil Conservation Grant Fund; and the Colorado Strategic Wildfire Action Plan. This change would be in effect for the three years that the request impacts.
    - **The request would move funding of the Colorado Water Conservation Board (CWCB) from the Operational Fund to the CWCB Construction Fund. This change would be in effect for the three years that the request impacts.**
    - The request would modify the reserve requirement of the Operational Fund from 200.0 percent to 100.0 percent. This would be an ongoing change.

The overall impact of the Governor's budget proposal would lead to a $6.9 million increase next year for CWCB. Unfortunately, the funding will decrease in FY 2026-27 to $97.6 million due to an anticipated decline in severance tax revenue. Furthermore, there will be an additional $55 million decrease over the next three years from a variety of budget balancing mechanisms that the Governor's office is proposing. Budget experts in the Governor's office are hopeful that the anticipated revenue from sports betting will

help mitigate the potential impacts of the budget cuts. That is a result of the voters approving Proposition JJ and the anticipated revenue amount is forecasted to be $22.4 million next year.

DNR JBC Briefing Document: https://leg.colorado.gov/sites/default/files/fy2025-26_natbrf2.pdf

Colorado governor proposes shielding funding for major water programs as state's $1B deficit looms
https://coloradosun.com/2024/12/05/colorado-governor-water-funding-deficit/

Other Capitol News

Capitol Leadership

House Democrats

- *Speaker of the House* – **Julie McCluskie** (Silverthorne)
- *Majority Leader* – **Monica Duran** (Wheat Ridge)
- *Assistant Majority Leader* – **Jennifer Bacon** (Denver)
- *Majority Co-Whips* – **Matthew Martinez** (Alamosa) and **Iman Jodeh** (Aurora)
- *Co-Majority Caucus Chairs* – **Mandy Lindsay** (Aurora) and **Junie Joseph** (Boulder)
- *Joint Budget Committee* – **Shannon Bird** (Arvada) and **Emily Sirota** (Denver)

Senate Democrats

- *President of the Senate* – **James Coleman** (Denver)
- *Majority Leader* – **Robert Rodriguez** (Denver)
- *Assistant Majority Leader* – **Lisa Cutter** (Arvada)
- *Majority Whip* – **Nich Hinrichsen** (Pueblo)
- *Majority Caucus Chair* – **Dylan Roberts** (Eagle County)
- *President Pro-Tempore* – **Dafna Michaelson Jenet** (Commerce City)
- *Joint Budget Committee* – **Jeff Bridges** (Greenwood Village), **Judy Amabile** (Boulder)

Senate Republicans

- *Minority Leader* – **Paul Lundeen** (Monument)
- *Assistant Minority Leader* – **Cleave Simpson** (Alamosa)
- *Minority Whip* – **Janice Rich** (Grand Junction)
- *Minority Caucus Chair* – **Byron Pelton** (Sterling)
- *Joint Budget Committee* – **Barb Kirkmeyer** (Fort Lupton)

House Republicans

- *Minority Leader* – **Rose Pugliese** (Colorado Springs)
- *Assistant Minority Leader* – **Ty Winter** (Colorado Springs)
- *Minority Whip* – **Ryan Armagost** (Berthoud)
- *Minority Caucus Chair* – **Anthony Hartsook** (Parker)
- *Joint Budget Committee* – **Rick Taggart** (Grand Junction)

Senate Resignations

Two Senate Democrats and one Republican Senator recently announced that they will be resigning their Senate seats in early January.

Democrat Senator Chris Hansen (SD 21 - Denver) has announced that he has accepted a position with the La Plata Electric Association and their new CEO. Senator Hansen was just elected to his second term in November and has served on the Joint Budget Committee and is known as one of the legislative leaders on energy issues. He was also the primary democrat sponsor of the property tax bill that was passed in the special session last summer. His resignation is effective on January 9 and a vacancy committee will be convened to choose his replacement. At least two House Representatives have announced that they will run for the appointment through the vacancy committee, Representative Steven Woodrow (HD 2-Denver) and Representative-Elect Sean Camacho (HD 6-Denver). Should one of them get the appointment, a second vacancy committee will be convened to choose a replacement for that House seat.

Democrat Senator Janet Buckner (SD 29 - Aurora) has also announced that she will also be resigning her seat on January 9th. In November, Senator Buckner was elected to her second term in the State Senate. She was first elected to the State Senate in 2020. Before that, she served 5 years in the House after being first appointed to fill the seat of her late husband, John Buckner, who died in office. Senator Buckner was a leader in education issues at the Capitol. Like the vacancy in SD 21, if a current House member is chosen by the vacancy committee to serve in the Senate, there will be another vacancy committee called to choose a replacement. Currently Representative Iman Jodeh (D-Aurora) has announced her intentions to run for the nomination.

Republican Senator Kevin VanWinkle (SD 30 – Highlands Ranch) will also resign his Senate seat in early January due to being elected to the Douglas County Board of County Commissioners in November. Senator VanWinkle first came to the State Capitol as a House Representative in 2015 and was elected to the State Senate in 2022. He was a staunch supporter of the Second Amendment and was a leader on business issues for the Senate Republicans. At this time there are no reports of a current House member being interested in the appointment so we anticipate only one vacancy committee will be convened due to his resignation.

Upcoming Important Dates

January 8 – 2025 General Assembly convenes

10.0 Staff Updates

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: **Mo Rock**

Subject: **Agenda Item 10.01 – 2024 Grant Extension Requests & Applications for 2025**

Date: **December 02, 2024**

This memo is being provided to update the Board on the status of the 2024 grantees and 2025 requests.

For the 2024 grant cycle, SWCD has disbursed the total amount to all projects except San Juan RC & D, which have requested an extension of $15,000 of their grant, and Mancos Conservation District. Mancos Conservation District plans to request the funding in 2024, and may come in under budget. SWCD has also disbursed all outstanding grant extensions from 2023. Farmers Water notified staff that the project to repair the Gurley Dam Slip Repair had been postponed to 2025 due to weather. If weather permits, they plan on completing the repair in March 2025; otherwise, it will be completed in August. Since the money has been disbursed to Farmers Water, they are asking for an extension to do the work into next year.

2024 Grant Status

Entity	Project	Disbursed	Approved
Fort Lewis College	Tribal Media Fellowship	$10,000	$10,000
Wright Ingrahm Institute	Dust on Snow	$20,000	$20,000
MVIC (EMERGENCY)	Beaver Ditch Repairs	$50,000	$50,000
Montezuma Land Conservancy	Water Education	$9,000	$9,000
San Juan RC & D – Animas	Animas Watershed Plan	$3,003	$20,000
Hermosa Company Ditch	Parshall Flume	$1,155	$1,155
Mancos Conservation District	Outreach Efforts	$0	$12,000
SCC – Dolores	Dolores River Restoration	$22,000	$22,000
Farmer Water Development Company (EMERGENCY)	Gurley Dam Slip Repair	$50,000	$50,000
Total:		$92,003	$194,15

2023 Grant Extension Status

Entity	Project	Disbursed	Awarded
Trout Unlimited	Pagosa Gateway Project	$17,000	$17,000
Town of Pagosa Springs	Yamaguchi South Project	$32,000	$32,000
Total:		$49,000	$49,000

2025 Grant Program

SWCD has received five grant applications for 2025 totaling $60,500. This total is less than in past years; we believe this is due to the available federal funding.

Entity	Project	Request	
Fort Lewis College	Tribal Media Fellowship	$10,000	Education
Mountain Studies Institute	SW CO Watershed Ed.	$10,000	Education
Mancos Conservation District	Furthering Env. Education	$10,000	Education
Mancos Conservation District	Watershed Wildfire Action Plan	14,500	Forums
Lone Cone Ditch and Reservoir Co	Lone Cone Rehabilitation Phase 2	$19,000	Water Su.
Total:		$60,500	

Fort Lewis College has also submitted a letter regarding our caps on funding per entity and how this has been restrictive for different Fort Lewis Departments. Please read the attached letter. We'll discuss this in detail at our February board meeting.

We are planning on sending out 2025 grant applications to the Board in early January, so Directors have time to review them, and raise any outstanding questions or concerns.

November 15, 2024

Southwestern Water Conservation District
841 E Second Ave.
Durango, CO 81301
Re: Requested change to SWCD Financial Assistance Program eligibility guidelines

Dear members of the Board of the Southwestern Water Conservation District (SWCD),

On behalf of the Four Corners Water Center at Fort Lewis College and the Tribal Media Center at KSUT, thank you for your support of water work at our institutions, and particularly the Tribal Water Media Fellowship. Many FLC programs have benefitted significantly from SWCD support, and we deeply appreciate our collaborative relationship with your organization.

We are reaching out to propose a change in the eligibility of entities seeking educational funding from the SWCD Financial Assistance Program. Current guidelines for the program stipulate a five-year maximum per qualified entity in each funding category. Under these guidelines, entire educational institutions (e.g., all of Fort Lewis College) are viewed as single qualified entities. These guidelines currently restrict the ability of institutions like FLC to benefit holistically from the SWCD grant program. For example, SWCD funding for the Tribal Water Media Fellowship has been extremely beneficial in alleviating program costs and enhancing offerings for FLC students. However, other FLC departments and entities that could benefit from the SWCD's Education grants are currently unable to apply for more than $5,000 over the next three years due to the five-year maximum for FLC as a whole. Examples of other FLC programs that could benefit from SWCD Education grant funds include student research projects (hosted across different FLC departments, including but not limited to the Department of Environment and Sustainability, the Biology Department, and the Sociology Department), FLC programs with a focus on water education (e.g., Fort Lewis on the Water), and internship programs (e.g., the FLC Tribal Water Leaders Internship Program). Thus, **we ask that the Board consider a change in which individual FLC programs and departments could be viewed as distinct qualified entities, rather than the entire institution being viewed as a single entity.**

As you are likely familiar, Fort Lewis College is the only four-year college in the nine counties served by the SWCD, and as such, our educational mission, responsibilities, and impact are significant in our region. Over 20 FLC faculty and staff are engaged in water-focused work, engaging students and community members in interdisciplinary solutions to water challenges. As a Native American-serving non-Tribal institution and with a student body composed of approximately 40% Indigenous students, 20% Hispanic and Latino students, and 44% first-generation students, our programs are uniquely positioned to bolster the next generation of diverse water leaders. Though FLC is the only institution of its kind in the region, there are many other regional educational organizations that are structured similarly (e.g., community colleges

or even K-12 schools that have different departments and programs). Thus, this change in the SWCD's eligibility guidelines would not only expand the impact of SWCD grant funds at FLC, but also contribute to a richer water education landscape in our region.

Furthermore, the nature of applications for educational programming are different than other funding requests for water supply projects, studies and processes, and emergencies that SWCD considers. Educational programs are uniquely far-reaching, and they amplify their impact over time through the training and other products that are generated and shared both during and after the funded project. At the same time, educational programs generally have less capacity to generate revenue and become financially independent over time. Therefore, the continued opportunity to apply for grant funding from SWCD when it is available (in competition with other educational proposals) has the potential to significantly enhance our community's access to educational programming related to water. **To further broaden the reach of this program, we additionally suggest that the five-year maximum in the education bucket be increased to reflect SWCD's interest in funding educational opportunities and the potential impact of these projects.** We specifically suggest a five-year maximum of $40,000-$50,000 with the recognition that funding is not guaranteed unless high quality programming is proposed to the SWCD board within the constraints of the application.

We want to reiterate our gratitude to the Board for their support of water work at FLC and for considering our proposed changes to the SWCD grant program. Please reach out with questions or if you would like to discuss this matter further.

Sincerely,

Dr. Carolyn Cummins
Director, Four Corners Water Center
Fort Lewis College
ccummins@fortlewis.edu

Dr. Kaitlin Mattos
Assistant Professor, Environment and Sustainability and Teacher Education
Fort Lewis College
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Colten Ashley
Coordinator, Tribal Media Center
KSUT
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10.3 Colorado River Update

Department of Interior Press Release

Post-2026 Colorado River Reservoir Operational Strategies for Lake Powell and Lake Mead Narrative of National Environmental Policy Act Alternatives

Approach to Alternative Development

- Features of all action alternatives will ensure a broad range of alternatives for analysis. Reclamation's goal for the post-2026 process is to allow for the adoption of specific guidelines for the coordinated reservoir management of Lake Powell and Lake Mead through their full operating range and to provide for the sustainable management of the Colorado River system and its resources under a wide range of potential future system and hydrologic conditions.
- An operating plan must be in place by August 2026. We are sharing the five alternatives now as a voluntary step in the National Environmental Policy Act (NEPA) process to enhance transparency and create a framework for a realistic and fair path for Colorado River Basin states, Tribes, and non-governmental organizations to continue to work toward a consensus agreement that protects the stability and sustainability of the Colorado River System into the future.
- Releasing the alternatives in advance of publishing the draft Environmental Impact Statement (DEIS) affords the public and affected water users more information about the process and provides greater opportunities for collaboration, to ensure that we have a plan in place before the current guidelines expire.

Concepts Common to All Alternatives

- All alternatives will undergo a detailed analysis of impacts on the natural and human environment as necessary to develop a Draft EIS. The analysis will also compare the performance of alternatives over a common set of key hydrologic metrics including reservoir elevations, water use and reductions, and deviations from Glen Canyon objective releases, pursuant to the Long-Range Operating Criteria (LROC).
- Releases from Lake Powell may be less than the specified release below elevation 3,490 ft due to Glen Canyon Dam infrastructure limitations.
- Additional Lower Basin shortages (and potential additional reductions in water deliveries to Mexico) may be necessary under future hydrologic scenarios where Lake Mead reaches dead pool.
- As in the 2001 and 2007 Guidelines, the Secretary retains all applicable authority to respond to exigent and emergency conditions.
- The determination of deliveries to Mexico is not a part of the proposed federal action. Any such determination would be made in accordance with the 1944 Treaty. Nevertheless, modeling assumptions with respect to the distribution of shortages for the Lower Division States include operationally aligned water delivery reductions to Mexico in order to analyze potential impacts to hydrologic and other environmental resources. Shortage amounts described are amounts of total shortage, including Mexico. Modeling assumptions that identify water deliveries to Mexico pursuant to the 1944 Treaty with Mexico would be developed after all necessary and appropriate discussions have been completed with the United States International Boundary and Water Commission in consultation with the Department of State.

Description of Alternatives

No Action

- The No Action does not meet the purpose of and need for the federal action, but it is included as a requirement of NEPA.
- Operations would revert to annual determinations announced through the Annual Operating Plan (AOP) process.
- Lake Powell release would be 8.23 maf unless a higher release is required for equalization or a lower release results from Glen Canyon Dam infrastructure limitations.
- Shortages to the Lower Basin would be based on priority and reach a maximum of 600 kaf.
- This would not represent a continuation of current operations but is generally based on the pre-existing operating guidance that was in place before the adoption of the 2007 Interim Guidelines Record of Decision (ROD), and thus includes no specific activities above Lake Powell beyond existing authorities (e.g., to make emergency releases from Colorado River Storage Project (CRSP) Initial Units to protect infrastructure at Glen Canyon Dam).
- Existing Intentionally Created Surplus (ICS) would be delivered in accordance with existing agreements, but there would be no new delivery and storage mechanisms.

Alternative 1: Federal Authorities

- This alternative is designed to achieve robust protection of critical infrastructure within the Department and Reclamation's current statutory authorities and absent new stakeholder agreements.
- Lake Powell releases would be determined based on Lake Powell elevations, unless equalization releases are required. Lake Powell releases would range from 9.5 to 5.0 maf. Releases could be less than 5.0 maf, and Lake Powell elevations could be increased by CRSP Initial Units, to protect infrastructure at Glen Canyon Dam.
- Lower Basin shortages of up to 3.5 maf would be distributed consistent with the priority system and would be triggered based on combined storage in Lake Powell and Lake Mead.
- Existing ICS (Intentionally Created Surplus) would be delivered in accordance with existing agreements, but there would be no new delivery and storage mechanisms.
- There would be explicit accounting of unused/undeveloped quantified Tribal water.

Alternative 2: Federal Authorities Hybrid

- This alternative is designed based on proposals and concepts from Tribal Nations, federal agencies, and other stakeholders to achieve robust protection of critical infrastructure while benefiting key resources (e.g., natural, hydropower and recreation) through a new approach to distributing storage between Lake Powell and Lake Mead that enhances the reservoirs' ability to support the Basin.
- Lake Powell releases would be determined based on a combination of Lake Powell and Lake Mead elevations, 10-year running-average hydrology, and Lower Basin deliveries. Lake Powell elevations could be increased by releases from CRSP Initial Units to protect infrastructure at Glen Canyon Dam.
- This alternative would include new delivery and storage mechanisms for Lake Powell and Lake Mead with federal and non-federal storage pools and maximum flexibilities for all users. The

operations incorporate Basin-wide shared contributions to the sustainability of the system, including Upper Basin conservation that would be stored in Lake Powell and Lower Basin shortages starting at 1.5 maf, which exceeds average annual evaporative and system losses at and below Lake Mead, and reaching a maximum of 3.5 maf.
- Shortages would be triggered based on combined storage in Lake Powell and Lake Mead and distributed pro-rata.
- There would be explicit accounting of unused/undeveloped quantified Tribal water.
- Some elements of this alternative would require additional federal statutory authorities and stakeholder agreements.

Alternative 3: Cooperative Conservation

- This alternative is informed by a proposal submitted by a consortium of conservation organizations with the goal of stabilizing system storage, integrating stewardship and mitigation strategies of Lakes Powell and Mead, maintaining opportunities for binational cooperative measures, incentivizing water conservation, and designing flexible water management strategies.
- Lake Powell releases would range from 11.0 maf to 5.0 maf and would be determined by total Upper Basin system storage and recent hydrology. Releases would switch to "run-of-river" when Lake Powell is at 3,510 ft or lower. The operations incorporate Basin-wide shared contributions to sustain system integrity, including up to 4.0 maf of shortages in the Lower Basin triggered by combined seven-reservoir storage and recent hydrology, and voluntary water contributions from both basins.
- Some elements of this alternative would require additional federal authorities and stakeholder agreements.

Alternative 4: Basin Hybrid

- This alternative is designed to reflect components from the proposals and concepts submitted by the Upper Division States, Lower Division States, and Tribal Nations to present elements that could provide a basis for coordinated operations and may facilitate greater agreement across the Basin.
- Lake Powell releases would be determined primarily based on Lake Powell elevation with consideration in some scenarios of Lake Mead elevation. Releases would range from 12.0 to 5.0 maf. Lake Powell elevations could be increased by releases from CRSP Initial Units to protect infrastructure at Glen Canyon Dam.
- This alternative would include new delivery and storage mechanisms for Lake Powell and Lake Mead, including incentivizing conservation and managing/offsetting reductions, to afford the Tribal and non-Tribal entities the same ability to use these mechanisms. The operations incorporate Basin-wide shared contributions, including Upper Basin conservation that would be stored in Lake Powell and up to 2.1 maf of Lower Basin shortages triggered by combined seven-reservoir storage.
- This alternative would analyze shortage distribution using two approaches: priority and pro-rata, both of which would be analyzed with and without shortages to Tribes.
- There would be explicit accounting of unused/undeveloped quantified Tribal water.
- Some elements of this alternative would require additional federal authorities and stakeholder agreements.

The Honorable Camille Calimlim Touton
Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington, DC 20240

November 18, 2024

VIA ELECTRONIC MAIL
mtouton@usbr.gov

Dear Commissioner Touton,

We are writing to reiterate the undersigned Colorado water users' support for the State of Colorado's position that the post-2026 Guidelines, and underlying NEPA analysis, must adhere to the fundamental principles outlined below.

1. **The Post-2026 guidelines must comply with the Law of the River, including the requirements of § 602(a) of the Colorado River Basin Project Act (P.L. 90-537). Simply put, the Secretary has a statutory obligation to ensure that storage levels in Lake Powell prevent impairment of consumptive uses in the Upper Basin pursuant to the Compact. This obligation cannot be diminished or modified by guidelines.**

Section 602(a) Storage is intended to allow the Upper Division States to continue to meet their obligations under the 1922 Colorado River Compact ("Compact") without impairing their ability to consumptively use the waters of the Colorado River System apportioned to them in perpetuity by the Compact. As outlined in the Upper Division States' letter to you dated June 11, 2024, the post-2026 guidelines must provide that the Secretary will annually determine the quantity of water necessary to comply with the requirements of § 602(a) as well as the Long-Range Operating Criteria and apply that determination to calculating release from Lake Powell. The current algorithm used to make that determination (in particular, the most critical period of record) must be updated to reflect the best available science.

2. A required minimum release of 8.23 maf from Lake Powell is unacceptable.

There is no authority to support the assertion that releases from Lake Powell are fixed at or above 8.23 million acre-feet (maf) per year. The Long-Range Operating Criteria identify a minimum release of 8.23 maf as an objective, not a requirement, to balance storage in Lake Powell and Lake Mead while assuring that Upper Basin consumptive uses are not impaired. As Reclamation's modeling demonstrates, a consistent release of 8.23 maf under the most likely future hydrology would reduce Lake Powell to dead pool in a few years. Requiring a minimum release of 8.23 maf would condemn the post-2026 guidelines to failure.

The assertion that the Upper Division States are obligated to deliver 8.23 million acre-feet annually to the Lower Basin contorts the terms of the Colorado River Compact. For example, the Compact directs that the Upper Division States "will not *cause* the flow at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet over any ten-year period". This is not a

delivery obligation and an analysis of compliance with this non-depletion obligation requires, among other things, a finding as to causation. Without question, climate change has, and will continue to have, a considerable impact on Colorado River flows. This aridification, and the fact that the Upper Division States annually consume three to four million acre-feet less than their Compact apportionment are among the factors that must be considered in any potential causation analysis. Moreover, the assertion of an annual minimum 8.23 maf at Lee Ferry feeds directly into the dispute as to whether there has been a declared "Mexican Treaty deficiency", which has never occurred.

3. The Secretary is the water master of the Lower Basin. The Secretary is not the water master of the Upper Basin.

Section 5 of the Boulder Canyon Project Act grants the Secretary of the Interior the authority to act as the "water master" of the Lower Basin. As water master, the Secretary regulates the delivery of water stored in Lake Mead to water users in the Lower Basin and has full power to reduce these deliveries in times of shortage. The Secretary has no such authority in the Upper Basin. Colorado has the sole authority to regulate the allocation and use of water in Colorado, subject only to its obligations to comply with duly adopted orders of the Upper Colorado River Commission in accordance with the Upper Colorado River Basin Compact of 1948. Any attempt to expand federal authority, for example (without limitation) by releasing water stored in Colorado reservoirs to bolster Lower Basin supplies, will be strongly opposed politically and legally.

Reliance on the recent Supreme Court decision in *Texas v. New Mexico* to assert expanded federal authority in the Upper Basin is misplaced. The principal holding in that case merely allows the United States to pursue a claim that New Mexico is violating the terms of the Rio Grande Compact. The Upper Division States are in full compliance with the Colorado River Compact, and in any event, the Court clearly stated that "different compacts divide state and federal authority differently."

4. The Guidelines cannot rely on "magic water" from the Upper Basin as a surrogate for additional contributions from the Upper Basin.

Although Colorado water users, in conjunction with the State of Colorado, will continue to explore parallel activities that encourage voluntary conservation, it is legally impossible for Colorado to agree to share in shortages as suggested by the Lower Division States. Attempting to impose mandatory reductions in water use – beyond the prior appropriation system - would violate the Colorado Constitution. Thus, the Colorado State Engineer has no authority to do so. The other Upper Division States are similarly constrained from requiring mandatory reductions. Beyond that, we are effectively taking significant shortages every year when consumptive use is measured against the Upper Basin's Compact apportionment.

Thank you for your continued work toward developing the post-2026 guidelines. We continue to hope for a negotiated seven-state agreement. However, if there is no agreement, we will support the State of Colorado in taking the actions required to protect Colorado's interests as outlined in the abovementioned principles.

Sincerely,

Andrew A. Mueller, General Manager
Colorado River Water
Conservation District

Ken Curtis, General Manager
Dolores Water Conservancy District

Tina Bergonzini, General Manager
Grand Valley Water Users Association

David Robbins
Hill and Robbins

Brad Wind, General Manager
Northern Colorado
Water Conservancy District

Jackie Fisher, General Manager
Orchard Mesa Irrigation District

Leann Noga, Executive Director
Southeastern Colorado
Water Conservancy District

Steve Wolff, General Manager
Southwestern Water Conservation
District

Steve Pope, Manager
Uncompahgre Valley
Water Users Association

Sonja Chavez, General Manager
Upper Gunnison River Water
Conservancy District

cc: Governor Jared Polis
Attorney General Phil Weiser
Senator Michael Bennet
Senator John Hickenlooper
Dan Gibbs, Executive Director
Colorado Department of Natural Resources
Commissioner Rebecca Mitchel
Commissioner Gene Shawcroft
Commissioner Estevan Lopez
Commissioner Brandon Gebhart
David Palumbo
Carly Jerla
Rod Smith

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Owns and Operates
THE GRAND VALLEY CANAL

THE GRAND VALLEY IRRIGATION COMPANY
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Grand Junction, Colorado
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September 13, 2024

Rebecca Mitchell — Via Email: rebecca.mitchell@state.co.us
State of Colorado Commissioner
Upper Colorado River Commission

Jason Ullmann — Via Email: jason.ullmann@state.co.us)
Colorado State Engineer

Lain Leoniak — Via Email: lain.leoniak@coag.gov
First Assistant Attorney General
Federal & Interstate Water
State of Colorado

Amy Ostdiek — Via Email: amy.ostdiek@state.co.us
Section Chief
Interstate, Federal, and Water Information Section
State of Colorado

RE: System Conservation Pilot Project 2024

Dear Ms. Mitchell, Mr. Ullmann, Ms. Leoniak and Ms. Ostdiek:

The Grand Valley Irrigation Company (GVIC) wishes to express its disappointment in the implementation of the System Conservation Pilot Project (SCPP) and its impact on GVIC's operations.

GVIC maintains Bylaws requiring the consent of the Board of Directors for any change in the use of water decreed to GVIC. A "change in use" is broadly defined in the Bylaws to include, but is not limited to, any change causing, or likely to cause, a transfer of water decreed to GVIC outside of its system, decrease in the ability of the Company to divert its decreed water at its headgate, or any act causing a decrease in the water available to the shareholders within the GVIC system that will, or is likely to, cause injury any shareholder. Changes in use are prohibited unless first submitted to ***and approved by*** the Board of Directors. The Bylaws provide detailed procedures to submit a consent request to the Board and remedies for violations.

Bylaws such as these are a valid exercise of a mutual irrigation company's legal authority. See *Fort Lyon Canal Co. v. Catlin Canal Co.*, 642 P. 2d 501, 508-509 (Colo. 1982). As the court noted in *Catlin,* any alteration of the delivery point for one stockholder's water can be expected to impact the ability of the system to supply water to other shareholders. *Catlin* at 505

("The possible adverse effects of removal of water from the ditch can reasonably be expected to be at least as severe as those following from an in-system change of place of delivery.")[1]

Water diverted to GVIC's headgate is distributed throughout its canal system.[2] If the available supply of water is less than the demand, then GVIC must, to the extent possible, pro rate the amount available to all requesting shareholders. § 7-42-101 (4) (a), C.R.S.

GVIC's system depends on a full diversion of its decreed water to maintain sufficient canal levels to reach the elevation of the shareholders' headgates and provide the "push water" critical for deliveries to the headgates and to reach the downstream sections of the canal system in Fruita and Loma. The need for full diversion is especially critical in the water short, hotter months of the summer when GVIC places calls on the Colorado River to meet shareholder demand. The administration of those calls is extremely important to GVIC's shareholders.

GVIC's recent communication with Ms. Leoniak[3], Mr. Ullmann[4] and Ms. Mitchell[5] informed the Board that its call would be denied by the Division Engineer to the extent of GVIC's shareholder participation in the SCPP. The 2024 reduction of GVIC's call this year[6] prevents the delivery of water that would otherwise flow through GVIC's headgate and will cause a decrease in the water within the GVIC system. As a mutual ditch company, organized pursuant to Colorado law, GVIC is entitled to allocate its full decreed entitlement to its various shareholders who have a demand for beneficial use. Thus, the decrease in GVIC's call adversely affects *all shareholders* in the system and especially those shareholders who continue to farm and irrigate while SCPP participants collect government paychecks for doing nothing. As it currently stands, SCPP participating shareholders are not seeking GVIC Board approval of their participation in the SCPP. Consequently, the participating shareholders are (i) violating GVIC policies and Bylaws and (ii) injuring other shareholders.

The Board has even broader concerns with the SCPP. As the program grows, the agricultural economy in the Grand Valley will suffer adverse economic impacts. Moreover, the SCPP does not serve any conservation objective since the water denied to GVIC simply becomes available for diversion by junior appropriators in Water Division 5 (including 100% consumptive transmountain diverters) thereby reversing the priority system.

GVIC shareholders will no longer be allowed to participate in the SCPP without advance Board approval in compliance with GVIC's Bylaws. The Division Engineer is expected to comply with his statutory duties to honor GVIC's calls on the Colorado River without reduction due to shareholder participation in the SCPP.

Thank you for your attention to this letter.

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[1] *Model Land and Irrigation Co. v. Madsen,* 285 P. 100 (Colo. 1930.

[2] Stretching from Palisade to Loma derived from the consolidation of the Grand River Canal, the Grand Valley Canal, the Mesa County Ditch, the Pioneer Extension Ditch, the Independent Ranchmen's Ditch, and the Keifer Extension Ditch

[3] Email dated March 21, 2024.

[4] Attending April 4, 2024 Board meeting.

[5] Attending May 2, 2024 Board meeting.

[6] Estimated at 25 c.f.s.

Sincerely,

GRAND VALLEY IRRIGATION COMPANY,
a Colorado mutual irrigation company

By: _____
Sean T. Norris, President

THE COLORADO SUN

NEWS: WATER

How paying water users to use less of the Colorado River is working out

Dozens of farmers, ranchers and other water users across Colorado, New Mexico, Utah and Wyoming got paid to cut their water use this year. Their total cutbacks equal about 1% of the states' typical use each year.

Shannon Mullane

3:50 AM MST on Nov 27, 2024

Conscience Bay President Eli Feldman, center, walks across a field that was partially fallowed on Friday Sept. 13, 2024, near Olathe in Montrose County. Conscience Bay's agricultural branch, Western States Ranches, enrolled in the 2024 System Conservation Program. (Shannon Mullane, The Colorado Sun)

MONTROSE COUNTY — In June — right at the start of the growing season — Eli Feldman and his team stopped watering forage grasses meant to fill thousands of cows' bellies … on purpose. In July, they did it again.

The reward was worth the lost crops, they said.

Feldman's team in Montrose County was one of dozens of farmers, ranchers and other water users across four states who got paid to cut their water use this year as part of a multistate drought relief effort in the Colorado River Basin. This year's cuts totalled about 63,600 acre-feet, or 1% of the four states' typical water use each year.

For Feldman, the program is an enormous potential revenue stream for farmers and a way to test out ways to conserve water with less financial risk.

"We think it's going to work well for us. We think that we're going to get paid an equal or greater amount of money than the value of the lost forage," said Feldman, president of Conscience Bay Company, a Boulder-based real estate firm that owns cropland on the Western Slope and runs one of the biggest cattle operations in the state.

In 2021 and 2022, the Colorado River's main reservoirs, lakes Mead and Powell, were so low that federal water officials made the basin's first shortage declaration. The overstretched river basin helps supply water for about 40 million people across the West, including communities across Colorado.

In response, the Upper Basin states — Colorado, New Mexico, Utah and Wyoming — relaunched the System Conservation Pilot Program, which pays volunteers to test out ways to cut back on their water use. Most of the participants have been farmers and ranchers.

This year, the federal program paid about $28.6 million in taxpayer dollars to 110 participants across four states to cut their use by 63,631 acre-feet.

One acre-foot roughly equals the annual use of two to three households. On average, the Upper Basin used about **4.6 million acre-feet of water per year** from 2016 to 2020.

In total, the program has paid people across all four states about $53.1 million to shrink water usage by about 148,700 acre-feet between 2015 and 2024.

System conservation in Colorado

In Colorado, the federal conservation program paid 46 participants $7,204,730 to cut water use by 14,239 acre-feet this year.

People can choose how they want to cut their water use and the amount of land they want to involve in the program. This year, Colorado farmers and ranchers mostly chose to fallow all or some of their land. Some tested out crops that are better able to withstand drought conditions. In return, they received $509 for each acre-foot of water conserved.

In Montrose County, Ryan Whitfield fallowed nearly 800 acres into the program in exchange for about $705,000. He did not know his total water savings as of Tuesday. He planned to use the money to pay water bills, taxes and labor costs so he didn't have to lay anyone off.

"You have to have gambling blood," Whitfield said. If you apply and plan as though you were approved — and then you weren't — then you'd lose, he said.

"I hope they have another one," he said. "I'd love to do it again."

In total, Conscience Bay Company enrolled about 800 acres spanning 16 fields across the Gunnison River Basin. Normally, the fields grow a mixture of legumes and grasses for cattle grazing as part of a much larger operation: When fully stocked, Conscience Bay has up to 2,800 cattle grazing 3,000 acres of irrigated land or about 200,000 acres of federal land in the high country, depending on the season.

This year, the Conscience Bay team decided to stop irrigating for part of the season in order to cut their water use by about 547 acre-feet in exchange for about $278,000. Those funds helped offset the lost revenue from fallowing crops.

The group aims to figure out how to maximize both growing forage and conserving water, and they are studying the longer term impacts of fallowing land. A metal instrument on a fence, called a LI-710 Evapotranspiration Sensor, counts the water molecules as they evaporate off the field. The device will help quantify the plants' consumptive use more precisely.

Colorado State University researcher Perry Cabot, left, talks with Conscience Bay team members about how he can measure water vapor leaving a field using a metal evapotranspiration measurement device on Friday Sept. 13, 2024, near Olathe in Montrose County. The field, managed by Conscience Bay's agricultural branch, Western States Ranches, was enrolled in the 2024 System Conservation Program. (Shannon Mullane, The Colorado Sun)

Sharing the findings will help answer questions for other farmers and ranchers, the team said.

"People are scared of what they don't know. You stop watering grass. Well, OK, how much yield are we going to lose this year? If we stress the plants, what's it going to do next year?" Feldman said.

The 14,000 acre-feet of water that does not get used up on the farmers' fields keeps flowing downstream. The idea is that more water in the rivers and streams can help mitigate some of the environmental impacts of the two-decade megadrought in the basin, according to state spokesperson Michael Sakas.

"The water conserved in this program may help mitigate drought at a local level, and also helps water users develop tools to adapt to long-term drought," said Sakas of the Colorado Department of Natural Resources.

When water flows downstream in Colorado, it can still be used by other farmers, ranchers and communities. It is not directed to a specific reservoir where it can be saved for an even drier day, Feldman said.

“We conserve water. It’s in the system for anybody else to divert. It’s hard to say what public benefit that really provides. It doesn’t really put us in a position where we’re any more protected next year,” Feldman said.

Participants from industries, cities and towns make up a small slice of the program. This year, there were two urban or industrial projects in other states.

In Colorado, the Bureau of Reclamation rejected the sole municipal application, which was from Pueblo Water Works south of Colorado Springs, according to the Upper Colorado River Commission.

The bureau did not agree to the water utility’s asking price, so Pueblo did not participate, wrote Joe Cervi, spokesperson for the utility, in an email to The Colorado Sun.

The original compensation was $479,987 for cutting water use by 943 acre-feet, according to state records.

“We will certainly look at applying in the future. Again, whether our bid is accepted is not up to us,” he said.

The future is entirely unclear

The conservation pilot program is set to end this year. U.S. Sen. John Hickenlooper, a Colorado Democrat, **introduced a bill** to reauthorize it through 2026. The bill successfully passed out of committee; however, it has weeks to move through the Senate and House before this Congress ends in early January.

If the bill does not pass, or no decision is made, it would have to be reintroduced in the next Congress for the program to be reauthorized.

The program’s funding comes from federal dollars from the Inflation Reduction Act, the Democrats’ landmark climate change and health care bill under the Biden administration. President-elect Donald Trump has pledged to rescind unspent money allocated by the law, **according to news reports**.

Getting applicants won’t be an issue for a future version of the program: This year’s effort was such a positive experience among participants that more people are already asking about joining, said Greg Vlaming, who runs Rocking V Soil and Water Conservation and helped guide nine farmers through the program’s application process this year.

Timing might be an issue. In 2023, complicated contracts and a short application window between December and March were concerns for potential applicants.

Farmers will need to start buying seed, fertilizer and preparing crop-specific machinery in early winter and will have to have their operations going by March and April, Vlaming said. But, those issues seem to have been resolved.

“I know my guys who signed up in 2024 would want to sign up again,” Vlaming said. “It’s a lucrative program.”

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: **Mo Rock**

Subject: **Agenda Item 10.04 – Audit Update**

Date: **December 02, 2024**

This memo is to update the Board of Directors on our inquiry of firms that may be available to perform the 2024 Audit. To date, Mo has reached out to several auditing firms, no firms have indicated an interest in the 2024 Audit.

- Stockman, Kast & Ryan
- McMahan and Associates, LLC
- Haynie & Company
- Anderson & Whitney, P.C
- Crady, Puca & Associates
- DWC
- EideBailly

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
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BOARD MEMORANDUM

From: **Mo Rock and Steve Wolff**
Subject: **10.06 Board Calendar**
Date: **10/03/2024**

This memorandum is to present a draft calendar for 2025 to the SWCD Board of Directors for consideration. We plan to continue with bi-monthly regular Board meetings moving forward. SWCD staff recommend continuing this structure, as it allows timely updates to the board. It also allows flexibility to adjust board meetings as necessary (such as opting for 1-day meetings when the agenda allows). The District also holds special board meetings during the legislative session and as needed during other times of the year. SWCD offers staff ten holidays, including 1 'floating' holiday, which SWCD staff recommend to the Board. For 2025, we are suggesting the floating holiday be on December 26, 2025

The draft calendar can be found attached to this memo. In addition, we have identified the following dates to below for your information:

- January 29-31 CWC Annual Convention
- April 28-30 NWRA DC Policy Conference
- **May 5 – 16: Steve and Mo are out of the Office**
- August 6-8 NWRA Western Water Seminar
- August 19-21 CWC Summer Conference
- November 5-7 NWRA Annual Conference
- December 16-18 CRWUA

Southwestern Water Conservation District Draft 2025 Calendar

January

Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
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27	28	29	30			

May

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June

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July

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August

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September

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November

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30						

December

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7	8	9	10	11	12	13
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28	29	30	31			

Regular Board Meetings
Special Board Meetings

SWCD Seminar

Holiday/SWCD Closed

Jun 30 Audit Submission Deadline
Oct 15 Budget Notice
Dec 15 Mill Levy Certification

Adopted xxx

11.0 Partner Updates

Elaine Chick - WIP Update – Dec. 12, 2024

- The **Water Law in a Nutshell** course, presented by WIP on October 17, 2024, in Norwood, was a resounding success. We had a strong turnout of 33 engaged participants, and the feedback was overwhelmingly positive. The venue was great, and the local caterers did a wonderful job. We had great feedback from attendees on both.

  WIP is also hosting a virtual **Water Law for Realtors** short course on December 12, 2024. Currently, we have 26 registrants, including 13 participants who signed up to receive CE credit.

- **WIP Website:** Final touches and updates are underway for the new WIP Website that will be ADA Compliant.

- **Outreach:** WIP participated in and had a table at the San Juan Water Conservancy District's "*This Is Your Watershed"* film event at the Pagosa Springs Center for the Arts on November 18th. As one of over a dozen water-related organizations present, WIP engaged with the public on water issues in the Upper San Juan River Watershed. The event drew an estimated 250 community members, many of whom visited the WIP table. It was a busy and highly successful evening for public outreach.

- **2025 SWCD Water Seminar:** Mo and Elaine are in the planning stages of putting together the panels and speakers for SWCD's upcoming Water Seminar that will take place on Friday, March 28th at the Sky Ute Casino. Next year's title theme is **Water Reimagined: Strategies for a Changing World**. We will be sending out a "Save the Date" next week.

- **Children's Water Festival:** The 2025 Children's Water Festival is scheduled for Wednesday, May 14, at Fort Lewis College. Unfortunately, the Events Department was unable to accommodate our request to move the date earlier, as in past years. This later timing, close to the end of the semester, may present challenges with transportation for some schools as it did this year. As noted in my previous report, a few schools were unable to participate this year due to the festival's timing being pushed one week later in May and were unable to secure bus transportation.

12.0 Hydrology Updates

From: **Water Quality Control Division** wqcd@waterqualitycontroldivision.ccsend.com
Subject: Announcement: Initial draft of Regulation No. 87
Date: December 2, 2024 at 5:45 PM
To: sara@cowatercongress.org

COLORADO
Department of Public Health & Environment

Announcement: Initial draft of Regulation No. 87

The draft regulation is now available for review

This is an announcement that the Water Quality Control Division has posted an initial draft of Regulation No. 87—Dredge and Fill Control Regulation for review. We will host our next meeting on Wednesday, Dec. 4, 2024, from 9:30 to 11:30 a.m. At this meeting, we will walk through the draft rule with participants and discuss feedback mechanisms. Meeting materials are available in this public folder.

Meeting details

Wednesday, Dec. 4, 2024
9:30-11:30 a.m.

Register to attend

Review the draft rule

When you register for the meeting, you will receive an email confirmation with instructions for joining the meeting, and you can add it to your calendar.

Background

On May 30, 2024, House Bill (HB) 24-1379 was signed into law. The intent of the legislation is to ensure that state waters are protected from the impacts of dredge and fill activity after the U.S. Supreme Court drastically limited the scope of protection under the federal Clean Water Act through its decision in *Sackett v. EPA*. HB24-1379 directs the Water Quality Control Division to develop a dredge and fill authorization program and the Water Quality Control Commission to establish permitting and mitigation rules by **Dec. 31, 2025**. The outcome will be Regulation No. 87, a control regulation for avoiding, minimizing, and mitigating the environmental impacts of dredge and fill activity.

Lenguaje y accesibilidad

Si necesita ayuda para entrar a la reunión o desea participar en español, póngase en contacto con la División escribiendo a cdphe.commentswqcd@state.co.us.

Stay informed

This email was sent to the “Reg 87 - Dredge and Fill” list. If you received this email from a colleague and are interested in subscribing to these notifications, please sign up using this form and select the "Reg 87 - Dredge and Fill" list. You can also visit the Reg. 87 - Dredge and Fill Program Implementation webpage for more information.

Contact

For questions or comments related to this email or stakeholder engagement webpage, email cdphe.commentswqcd@state.co.us.

Accessibility statement and support
cdphe.colorado.gov/water-quality

Water Quality Control Division | 4300 Cherry Creek S Dr | Denver, CO 80246 US

Other Reports

CENTER FOR SNOW & AVALANCHE STUDIES

CSAS

CENTER FOR SNOW AND AVALANCHE STUDIES
COLORADO DUST-ON-SNOW PROGRAM

10/1/23 – 9/30/24

Season Summary Report

Water Year 2024

For

Southwestern Water Conservation District

PROJECT OBJECTIVES AND PERFORMANCE

The Center for Snow and Avalanche Studies' (CSAS) Colorado Dust-on-Snow (CODOS) program, in Silverton, Colorado performs dust-on-snow monitoring throughout the Colorado Mountains. Through this program CSAS provides timely analyses and forecasts of dust effects to the Colorado River water management community and other interested stakeholders. The information provided through the program benefits the Lower Colorado Region by increasing the knowledge of the natural system, with the potential to improve runoff forecasts, and thereby improving operations of the Region's facilities. The primary CODOS deliverable is a series of operational dust-on-snow condition updates, alerts, and emails tailored to operations, which are available for Reclamation and internal re-distribution. Research reports and products from other dust-on-snow research teams are also available for use by Reclamation.

This information is provided for study plots at Senator Beck Study Basin, and ten other CODOS sites around the state of Colorado:

- Park Cone
- Spring Creek Pass
- Wolf Creek Pass
- Hoosier Pass
- Grizzly Peak
- Berthoud Summit
- Willow Creek Pass
- Rabbit Ears (west)
- McClure Pass
- Grand Mesa

CSAS performs field work at all eleven sites and documents dust-on-snow layers and other snowpack conditions, monitor Snow Telemetry (SNOTEL) sites between visits, evaluate regional hydrologic data, and contact CODOS program participants and other local observers for other observations.

CSAS, through the CODOS Program also:

1) Contributes information to support the Colorado Basin River Forecast Center and other River Forecast Centers effort to quantify dust effects on snowmelt in their streamflow forecast products

2) Continues to collect field samples from Senator Beck Study Basin and the other ten CODOS monitoring sites for Dr. Harland Goldstein at the U.S. Geological Survey in Denver in support of his team's research program in the Colorado Plateau titled "Effects of Climatic Variability and Land Use on American Drylands"

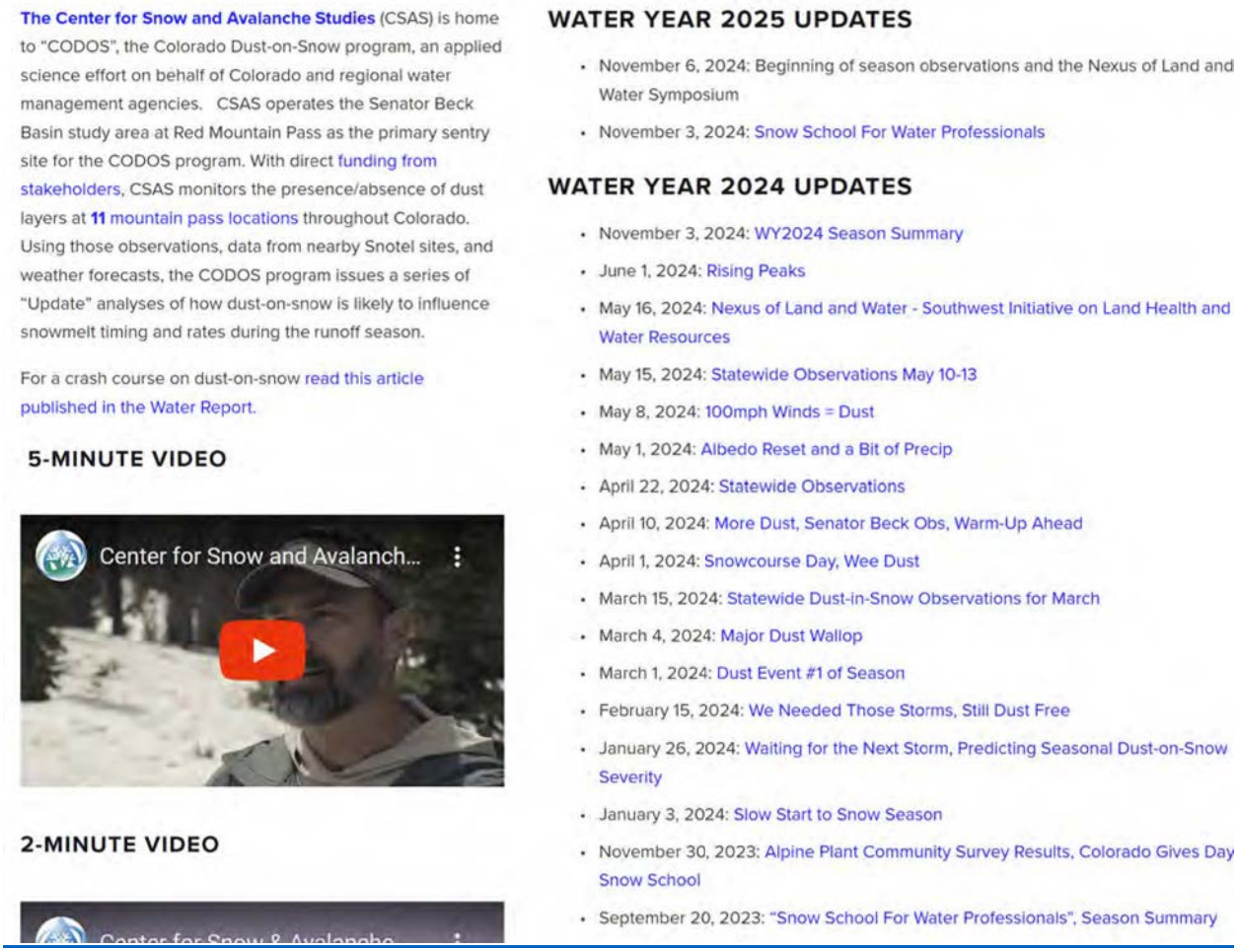
3) Host USGS-NGWOS snow and soil sensors at our 12,200' Senator Beck Study Site.

4) Continues to provide field support and sampling services to the NASA-funded research team in an effort to improve snowpack monitoring and snowmelt modeling; and

5) Continues to support other ongoing and developing dust-on-snow related research efforts.

Water year 2024 (WY2024) tasks and objectives were completed throughout the winter season. The CODOS team visited sample locations around Colorado a total of three occasions and the Senator Beck Research site continuously, documenting snowpack and dust-on-snow conditions. A total of nineteen timely dust-on-snow alerts and updates plus an end of season summary report were issued. There were no issues that hindered or prevented all objectives to be met on schedule. Updates were e-mailed to Bureau of Reclamation participants and posted on the project website, along with supporting data, graphics and pictures.

These data and updates can be viewed at: http://www.codos.org/#codos



CODOS Program issued 17 alerts and updates throughout the winter 2023/24 season.

WATER YEAR 2024 SUMMARY

Note, to view all images associated with report please see:

https://www.codos.org/codosupdates/2024seasonsummary

It was a sluggish start with precipitation for the WY 2024 snow season. At the beginning of January, most Colorado River basins were sitting at 50-70% median SWE. At Swamp Angel, we were behind on our storms - five storms as of the beginning January, down from the average eight, and they didn't deliver anything spectacular. But just when we were twiddling our thumbs, the storms started to roll in. The most notable beginning-of-the-season storm was on January 11th which bumped up major Colorado basins to 70-99% of normal. Through February, the regional snowpack continued to make gains and more basins approached near-normal. On Feb 26-27 (D1), we received the first layer of dust on our snowpack of the season, which kicked up due to a couple of very windy days in the Four Corners region where we had reports of widespread dust mobilization. We saw a sort of pattern of repeatedly falling behind on SWE, and then surging to catch up with wet, atmospheric-river-like storms. The winds never fully abated at the end of February, and another bigger dust event occurred March 2-3 (D2); though those same winds brought an insulating layer of precipitation, which helped maintain a near-normal snowpack right at the kickoff of the annual CODOS Tour. Dust event #3 occurred March 30-31 (D3), and sustained high winds on April 4-5 (D4) ushered in the next dust event. In April, warm temperatures and dirty snow surfaces made a big-time dent in a near-normal Colorado snowpack. We saw some of the largest 14-day SWE loss in SNOTEL station records in southwest river basins – 8" loss from April 12-26 (check out Colorado Climate Center's blog for more details) – not excluding Swamp Angel Study Plot. A cool May and precip (and dust May 7th (D5)) helped extend the melt season, and we even had some big snowfalls in the central mountains, which bumped regional SWE up to 136%. Swamp Angel snowpack fully melted out June 2nd and Colorado snowpack fully melted out by June 23rd. We ended the WY2024 season with an average dust year on an average snowpack.

MONTHLY WEATHER CONDITIONS

October Weather Summary

Temperatures across the state of Colorado were near-normal to slightly above-normal for the month of October. Precipitation was below average; some places in Colorado received less than 2% of normal. Swamp Angel Study Plot fell short of average with 9 days and only 59 mm (68% of average) of precipitation. Swamp Angel's snow sensor has yet to be installed for the season. Drought conditions popped up in the west/southwest part of the state. However, it was a snowy Halloween! El Niño conditions have everyone curious about what kind of snow year might be on the horizon, forecasted at 100% probability of continuing through February,

and 80% through the whole winter into May. Next month is forecasted to be warm, with a 40-50% chance of above normal temperatures.

November Weather Summary

November was dry and warm, especially in eastern Colorado. Drought conditions increased to cover 14% of Colorado, deepening in the southwest and developing in the eastern plains, with the Rio Grande River Basin developing extreme (D3) drought conditions. SASP saw two winter snow storms - an average eleven days with precipitation, yet only about 63% of normal precipitation. A strong El Niño continues; let's hope things kick up.

December Weather Summary

December led with a hefty winter storm, improving Colorado's statewide SWE from 54% to 85% of normal following one big storm. As the rest of the month progressed, there were a few fun pockets of big snowfall in the state, lots of low-angle pow out in the eastern plains. Just like there were pockets of much above average, so were there pockets of below average. Colorado snowpack didn't much recover in the end, with about 70% of average SWE to round out the year. Statewide, the year ended with the 6th straight warmer-than-average month in Colorado. Drought expanded again in Colorado slightly, continuing in the southwestern and eastern parts of the state. There is an 80% chance of El Nino continuing through spring, when neutral conditions may start to take over. Some hopeful news: NOAA seasonal outlooks suggest above average precipitation for all of Colorado from January through March. For Swamp Angel Study Plot (SASP), December saw about half as many winter storms as is normal, below average days of precipitation, and about 73% of normal precipitation. And, we got the snow depth sensor re-installed and running at Swamp Angel. At the end of the month, snow depth was 0.66 meters.

January Weather Summary

January's snowpack was slightly resuscitated by a nice mid-month storm cycle, with multiple snowstorms bumping statewide SWE to 87% of average by the end of the month. The Upper San Juan River Basin bumped up to 78%, and with the lowest SWE of the state, our neighbor the Rio Grande at 66% of normal. Statewide precip was close to average, though there were extreme differences in distribution: the southeast corner of Colorado saw much-above average precipitation, and the Grand Junction area was very dry. Here in the southwest we saw warmer-than-average temps. January became the 7th straight month that was warmer than the 20th century average. NOAA seasonal forecast suggests increased probability of above average temperatures for Colorado, from 33 to 60% above normal. 28% of the state remains in drought, with the worst conditions in the southwest. At Swamp Angel, we had an above average January (yay!) with 4 winter storms, 18 days of precipitation, and 138mm of new SWE (119% of average). SASP snow height started the month at 0.66 m and ended the month with 1.13 m – a respectable half meter gain in total snow depth. El Nino continues – there's a 70% chance of El Nino continuing through spring (March-May). Precipitation outlook for February supposedly above average.

February Weather Summary

The Front Range, and the eastern plains from north to south saw a bountiful February with areas of 200-400% of normal precipitation - our San Juans didn't do too bad either. We made gains to 91% of average snowpack by the end of February, with all of Colorado sitting at 97%. Regional temperatures slightly-above to above normal in February for most of Colorado. Streamflow volume forecasts look to be near-normal to below normal April-July. Colorado saw some drought improvement, but the southwest is still hanging out in the D0-D2 categories. El Nino continues and there is an 80% chance of these conditions continuing during March, though start to expect a transition to neutral. March could bring above normal precip, the NOAA precip outlook suggests. In February, Swamp Angel had 3 winter storms, 14 days of precipitation, and 125 mm of precipitation. With near-average storm count and days of precipitation, the storm totals added up to 112% of average February precipitation. At SASP, snowpack increased about half a meter, and at Senator Beck, we gained 30 centimeters to a height of 1.2 meters. The end of February brought a nice snow storm with a not-so-nice dust layer. Dust was pretty light in severity at Swamp Angel.

March Weather Summary

March delivered! Much of Colorado received greater than 150% of average precip, though pretty dry (and hot) in the southeastern plains. Mostly, temperatures were normal to below normal throughout the state, but warmer pockets existed. Statewide SWE conditions jumped to 112% of average in Colorado. The March snow lightened drought, improving conditions in western Colorado and eliminating drought conditions in northern Colorado. Another dust event swept in March 2-3 and ended up pretty widespread, as the winds have kicked up as well. The San Juans were hit pretty hard; we saw decreasing severity in dust heading north. However, a March 13-15 event brought lots of snow to the state, burying that dust layer for later - daily snowfall records were broken in Canon City, Colorado Springs, Estes Park, and 25 more (28 sites total). Swamp Angel totaled 4 winter storms, 17 days of precip, and 120 mm of precip. A few extra days of precip than average, and about average precipitation (104%). Snowpack peaked at 1.99 m March 26th. On a large scale, ocean temps are cooling, and by early fall, we have a greater than 60% chance of La Nina conditions developing.

April Weather Summary

Colorado concluded April with a snowpack (SWE) averaging 92%. Precipitation lagged throughout most of the state, though a good chunk of the northeast was an exception. Here in the southwest we saw below average precip, and 0-4 degrees F above average for temperature. Our respectable April 1st snowpack took a hit throughout April. The April CODOS tour found the most severe dust layer lingering 1-2 feet under the snow surface. The second layer however, is under approximately 5" of recent new snow accumulation in the eastern and northern sites, and at the surface in the southern sites. SNOTEL data showed nosedives in SWE in southern sites starting sometime in the second week of April, scant storms and warmer temperatures didn't help mute the dust on the snow surface. Northern Colorado river basins

are faring better for snowpack, with near normal conditions. Southern Colorado river basins are lagging, around 70% of normal. South-central Colorado saw improved drought conditions, while southeastern Colorado drought worsened. Swampy's snowpack lost 65 centimeters in April, despite 3 winter storms, 12 days of precip, and 75 mm of precip. Only 68% of average precip for the month.

May Weather Summary

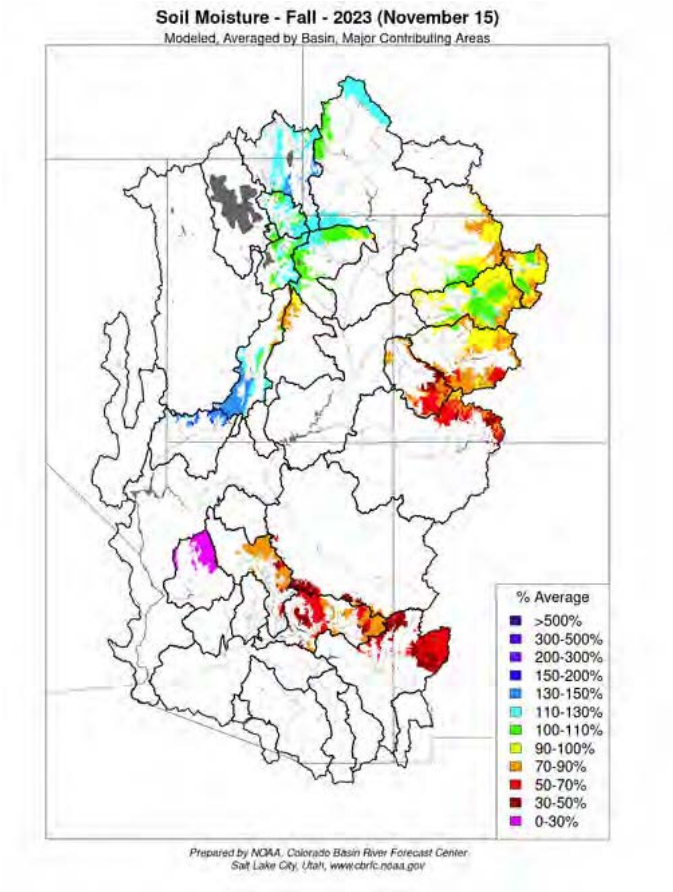
Across Colorado, May temperatures were cooler than average, a nice preservative for our snowpack. Some lucky parts of Colorado even saw lots of new snow, though the Southwest was left out of the fun. With a chill May comes above-average regional SWE - 136% for Colorado. Seasonal temperature and precipitation outlooks (NOAA) for the summer are showing below average precipitation and above average temperatures, not what we like to hear but let's hope for the best. Swamp Angel Study Plot received 77% of average precipitation, and sat at about 87% of average year-to-date cumulative precipitation at the end of May. It looks like our snowpack fully melted out around June 2nd.

June Weather Summary

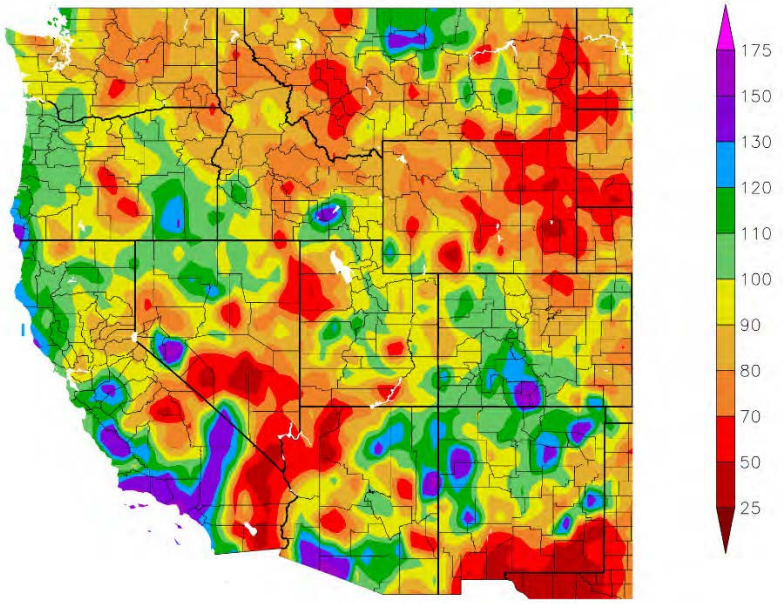
The monsoons looked to be delayed, yet precip was a'plenty in the latter half of June. The rains just kept coming for Southwestern Colorado. Yet, this moisture was not the North American Monsoon – in fact, it was the rather quick transition out of El Niño into ENSO neutral conditions, which resulted in strengthened jet streams and moisture from the Gulf. And, it was warm – temps above normal for much of June. Heavy rainfall hit Swampy – with six days recording precipitation in June, total precipitation was 129 mm or 385% of normal. Silverton was wrapped up in misty clouds for days at a time.

Above: Select photos of dust-on-snow and snowpack conditions for winter WY2024 on the report webpage.

Below: Soil moisture conditions going into winter for the last four years. The beginning of WY2023 soil moisture was better than the previous few years due to improved monsoon activity and a few early season storms. Healthy soil moisture conditions generally improve the likelihood of more efficient snowmelt runoff.



Percent of Normal Precipitation (%)
11/4/2023 – 11/3/2024



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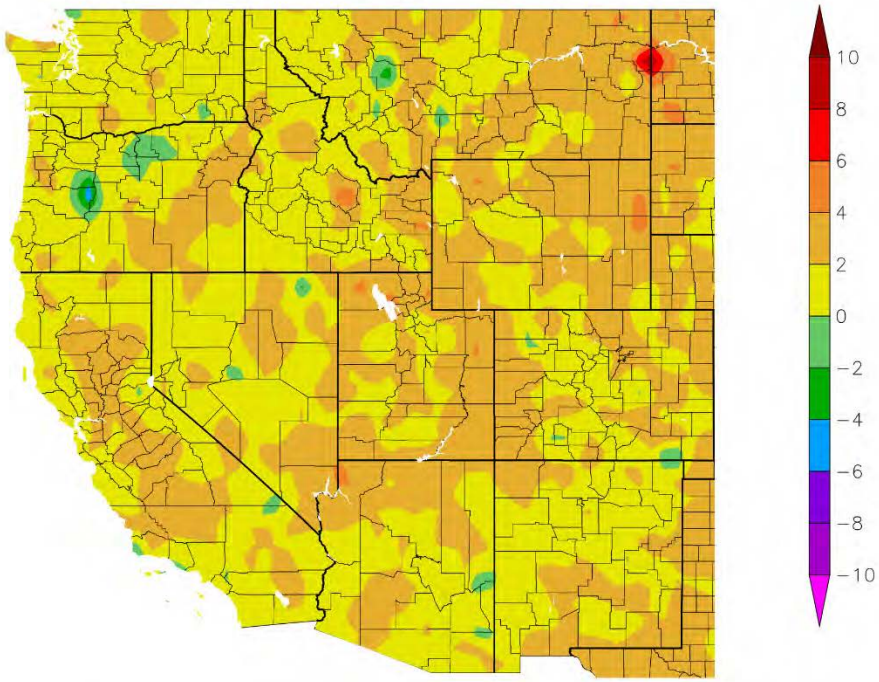
NOAA Regional Climate Centers

Departure from Normal Temperature (F)
11/1/2023 – 10/31/2024



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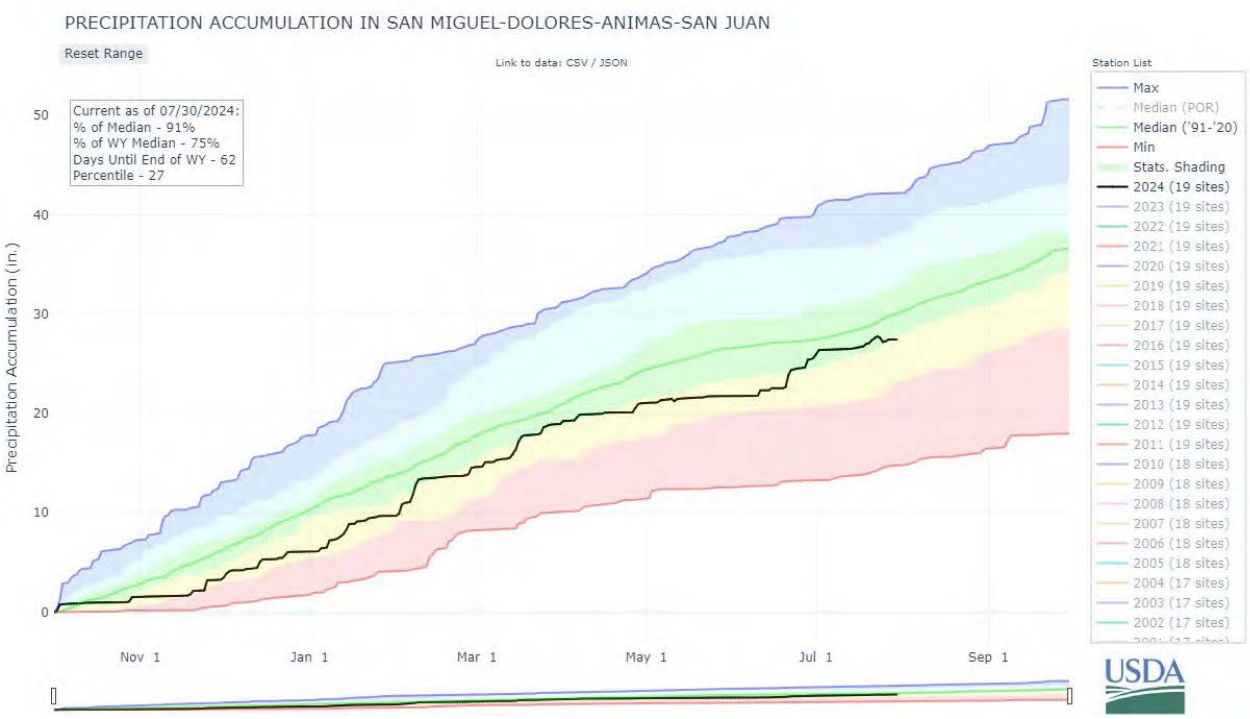
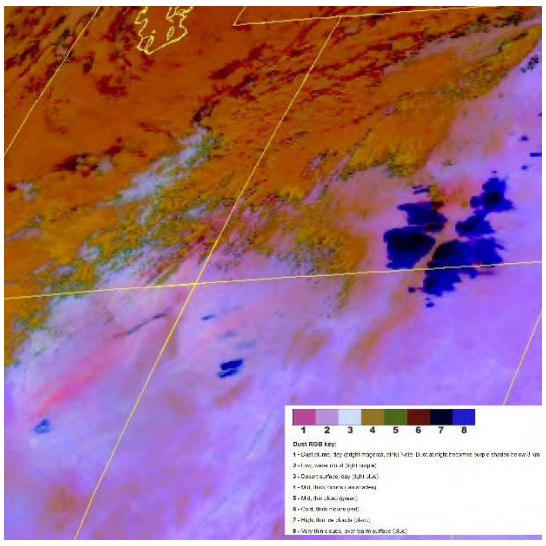
NOAA Regional Climate Centers



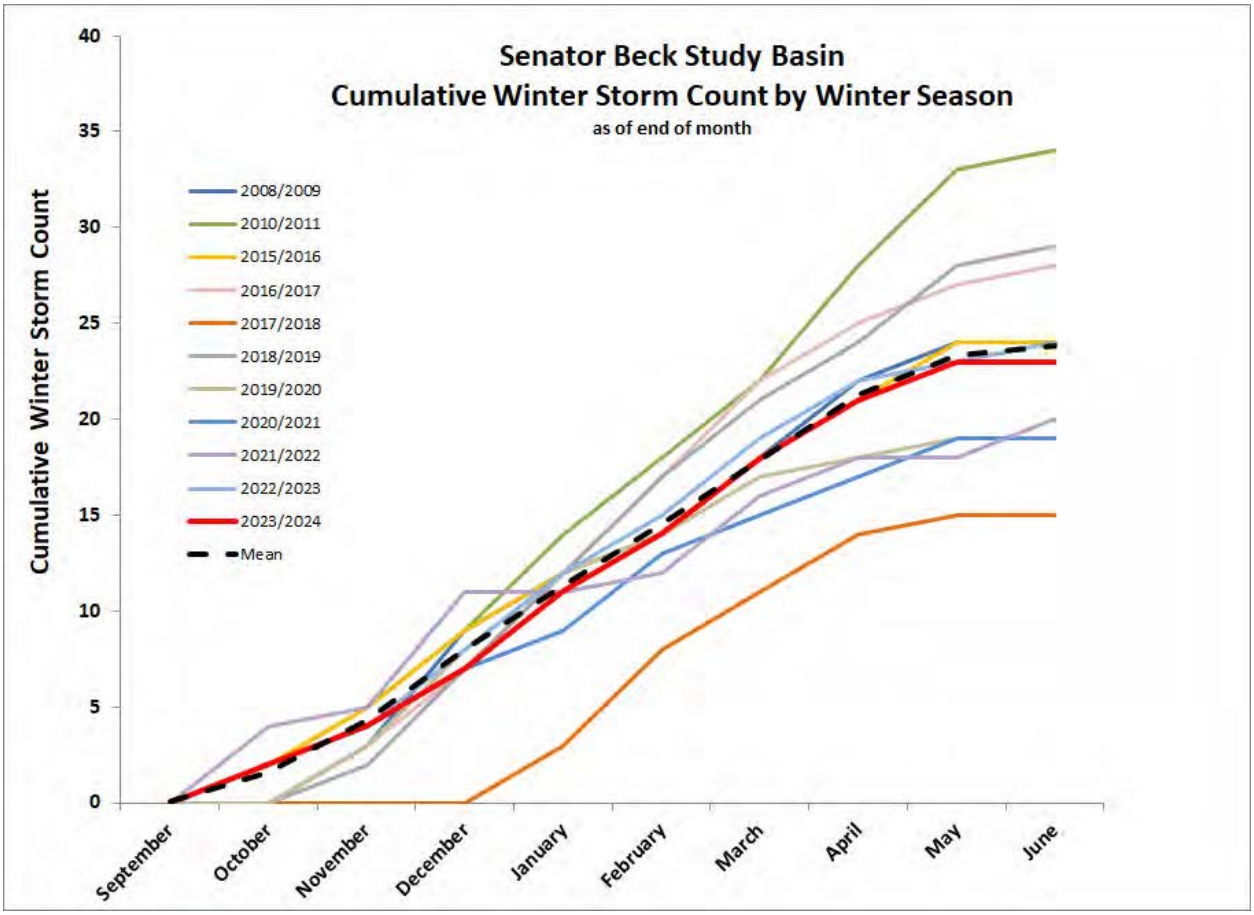
Above: From the outset of water year 2024 precipitation and snow accumulation started off solidly and kept improving as the season progressed. Most major basins saw 150%-400% of normal precipitation in March. The summer monsoons were very late in arriving (mid-August as of this writing) have recently become more active, particularly Southwest Colorado. June was very wet in the entire Southwestern quadrant of Colorado. The Front Range enjoyed a pretty wet June and well-timed rain events in July/August, enough to keep vegetation mostly green, a nice change from recent summers.



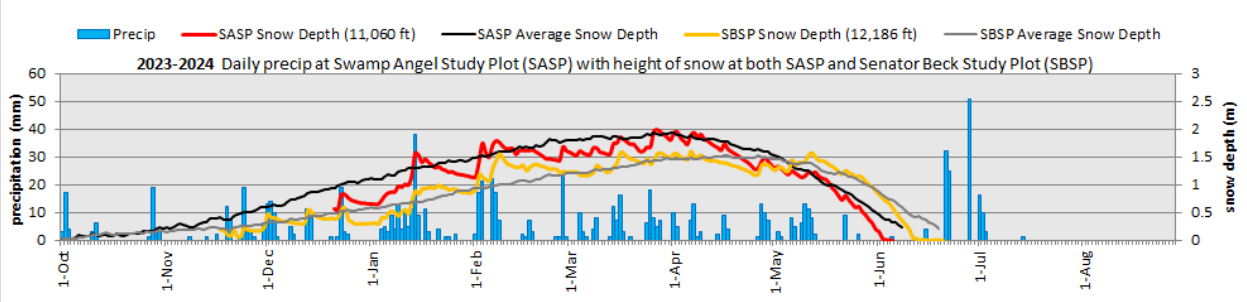
Above: Images that help illustrate WY2024. Starting at the first slide: 1) GOES image showing the big dust event of the year on April 4 making its way to Colorado (brighter pink).

SENATOR BECK STUDY BASIN DATA

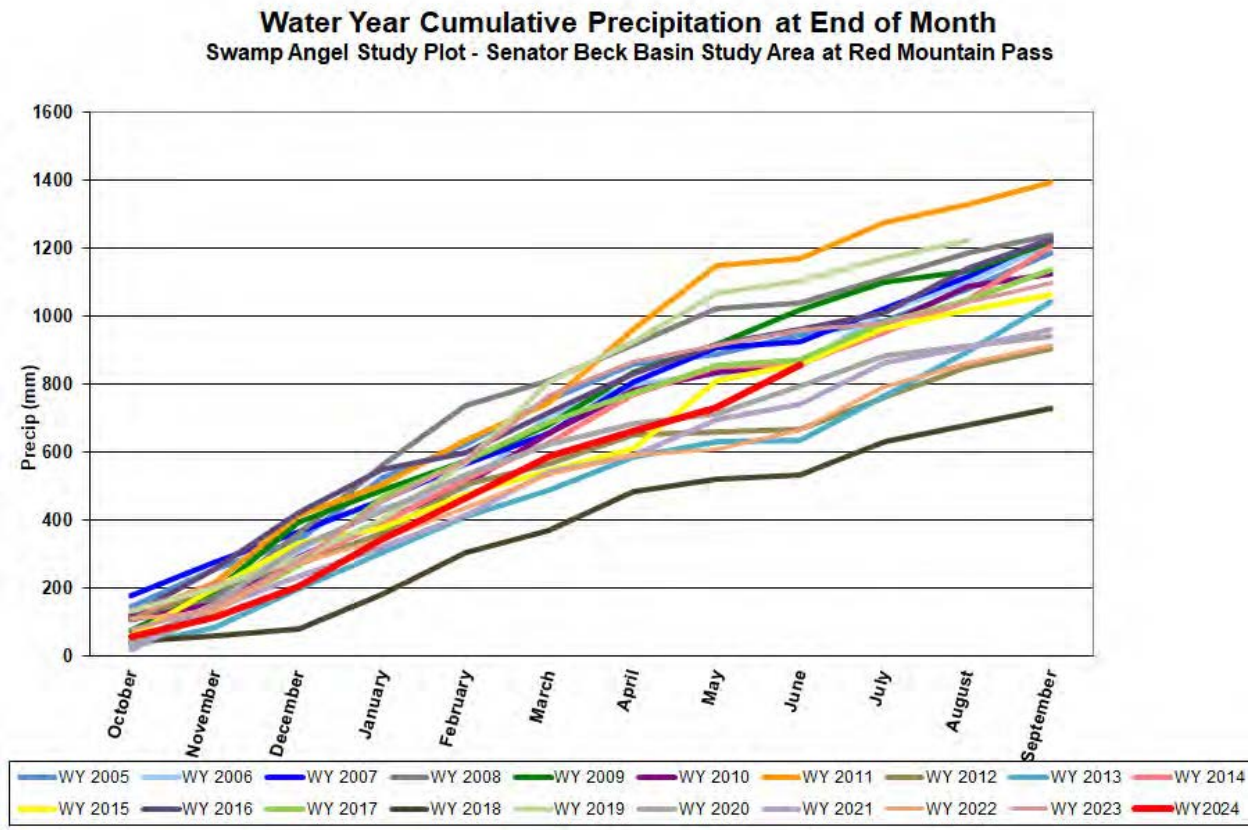
This section describes conditions and data collected by the Center for Snow and Avalanche Studies at our Senator Beck Basin Study Area (SBB) at Red Mountain Pass under our Mountain System Monitoring program, which includes the Colorado Dust-on-Snow Program (CODOS). At SBB, snowpack, weather, soils, and radiation conditions are monitored and measured at the well-sheltered subalpine Swamp Angel Study Plot (SASP, 11,060') and at the more exposed, alpine Senator Beck Study Plot (SBSP, 12,180'). Nearby, wind speed, wind direction, air temperature, and humidity data are collected at the Putney Study Plot (PTSP, 12,323'), located to minimize the influence of local terrain on those measurements. Finally, SBB streamflow discharge is continuously measured at the SBB pour point at the Senator Beck Stream Gauge (SBSG, 11,030'), in a broad-crested, notched weir.



All total we received 20 storms, just under average for our season. A storm is defined as receiving 12 mm (0.5") or more of precipitation with no break in precipitation greater than 12 hours. Winter storm reports can be viewed at the snowstudies.org website.



The above graph shows precipitation at SASP with snow depth at SASP and SBSP. Our snowpack was lagging at the beginning of the season, not really catching up until January. After January, we had a series of consistent storms that brought enough moisture to carry us through. You can see the rapid melt at the end of April due to dust at the surface and really warm air temps, with a big dip in snowpack depth, and a plateauing as May ushered some cooler temperatures and precipitation. In June, we received some heavy downpours that bumped our precipitation for the month over 300% of average.

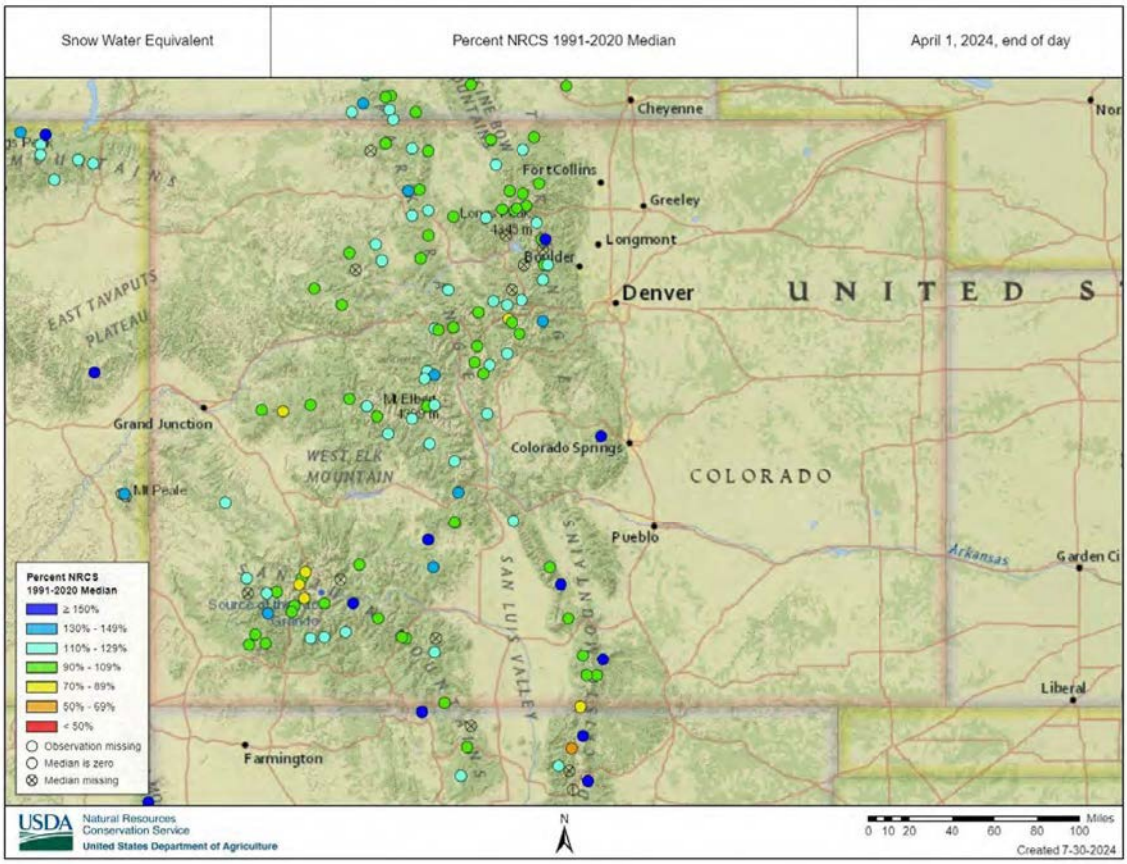


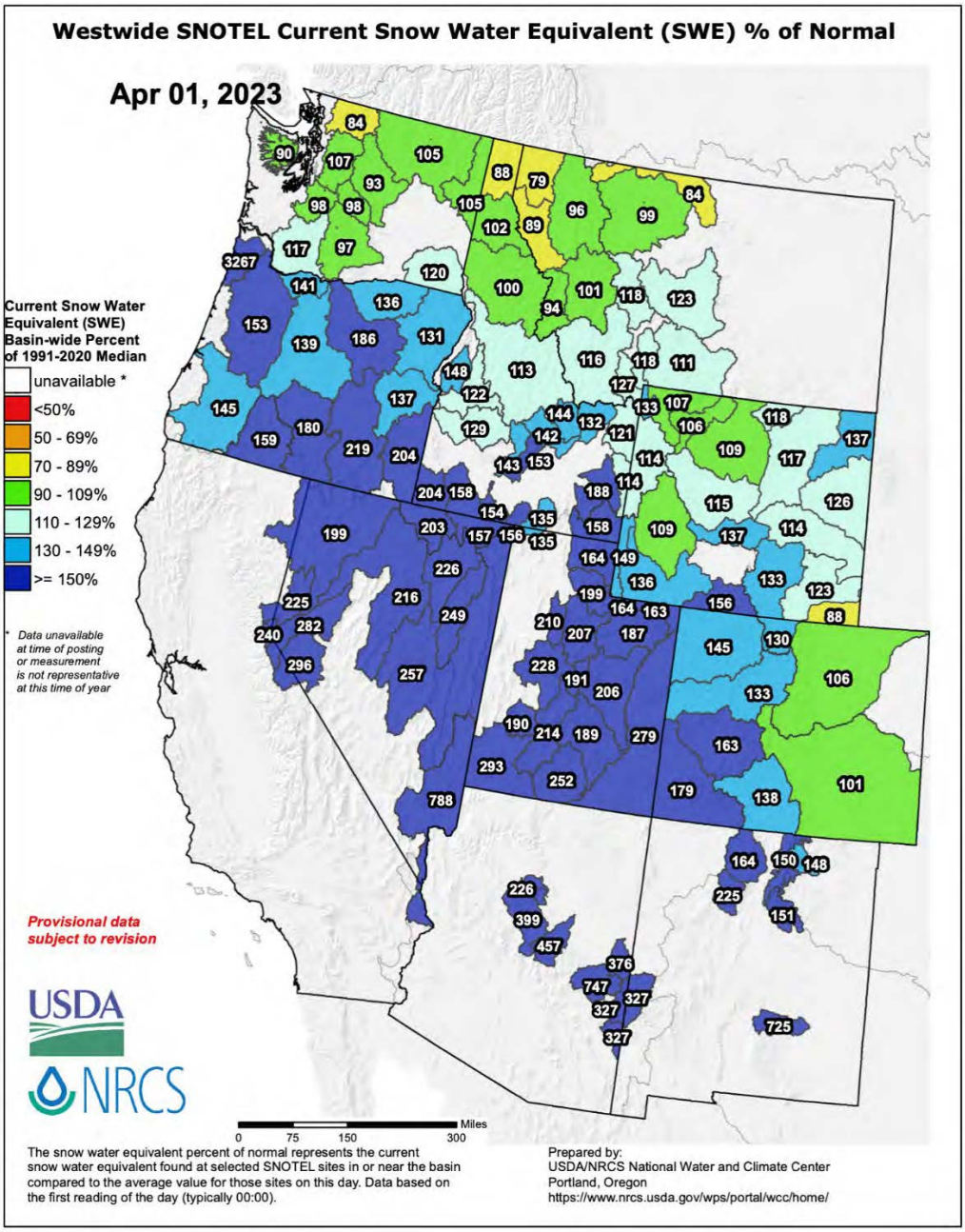
Above: Water Year 2024 cumulative precipitation.

SNOWPACK CONDITIONS

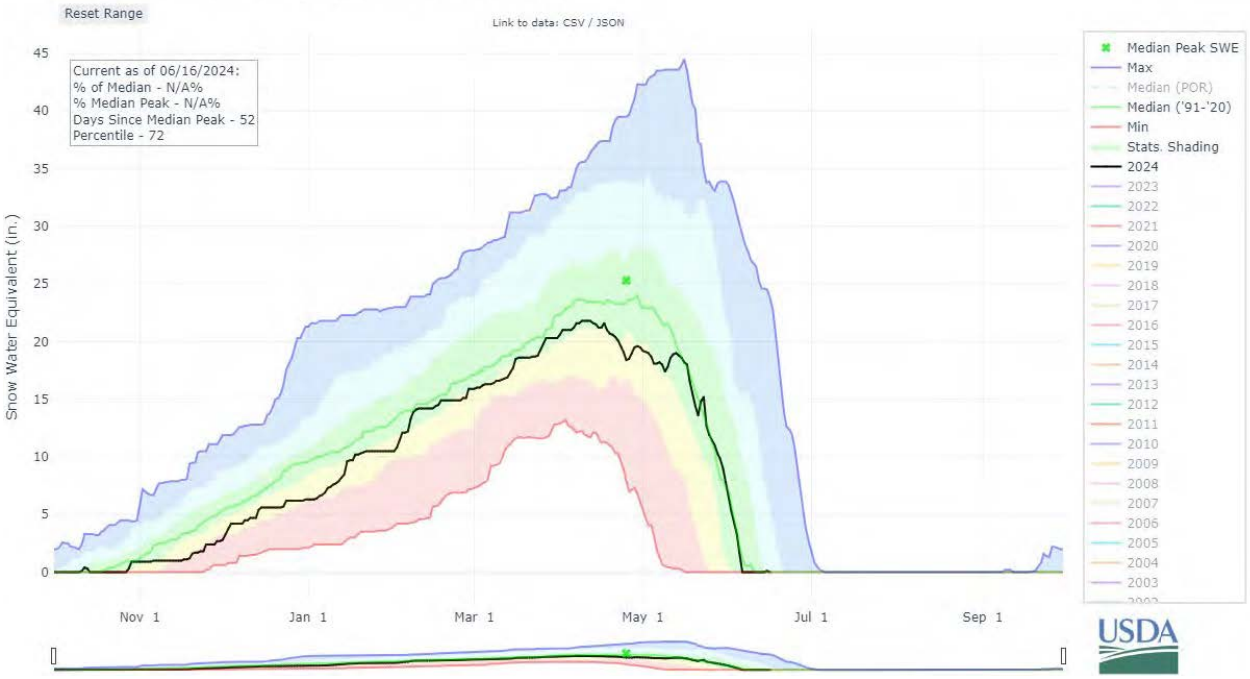
This Colorado snowpack season was a mix of conditions. This winter was characterized by a string of warmer-than-average monthly temperatures, while precipitation was slow to start though began to consistently roll in by mid-season, though amounts varied in extremes throughout the state. We saw a big melt event end of April, but recovered slightly in May and June. Streamflow outlooks were generally low until mid/late season storms pushed many above average.

Starting in October, precipitation was generally below average across Colorado to start the season, with exceptions of a few pockets in the central mountains. A Halloween snowstorm dropped 8-24" of fresh flakes on the central mountains, marking a nice start to November. From there, precipitation stalled; only certain areas of eastern and southern Colorado saw lots of December snowfall. At Swampy, our snowpack accumulation dragged until January, when that nice mid-Jan storm cycle brought our precipitation totals over average, with 18 days and 138 mm of precipitation. That string of storms in the middle of January brought many watersheds up to near-normal in a short period of time. On January 1st, the Upper San Juan basin averaged just 61% median SWE, the Gunnison River basin 71%, and the Colorado Headwaters averaged 68% median SWE. By January 15th, the Upper San Juan basin jumped to 86%, the Gunnison up to 94%, and the Colorado Headwaters averaged 97% median SWE. February is not to be forgotten, with above-normal precipitation, and notably, a historic deluge of rain and snow on Denver and Boulder. February and March also brought above-average precipitation for Swamp Angel. At the end of February, we began clocking dust events starting with D1, a big windy dusty February 26-27 in the Four Corners region, which distributed a light dust layer visible in Senator Beck Basin. March brought statewide monthly temperatures near-average and continued the precip accumulation across the state, generally wet, which tapered off into a dry April. The heat cranked up in April, 0-4 degrees above average across the state. We saw historic losses of SWE at the end of April for more than a few SNOTEL stations. The beginning of May saw near-normal SWE conditions in the northern Colorado Mountains, and below-average percentages in the southern mountains. Notably, the Rio Grande was at 57% median SWE as of May 1st. May brought much needed cool temperatures and fresh precipitation, which resuscitated the snowpack from the end-of-April dive prompted by dirty snow surfaces and hot spring days. By June 1st, with the exception of the Rio Grande and the upper San Juan, the major Colorado river basins were between 107-165% median SWE. Snowpacks melted in June, and the rains began. June brought heavy rain to the Four Corners region, though other areas of the state were extremely dry. Our date of snow-all-gone was June 2nd, and the regional Colorado snowpack melted out June 23rd.

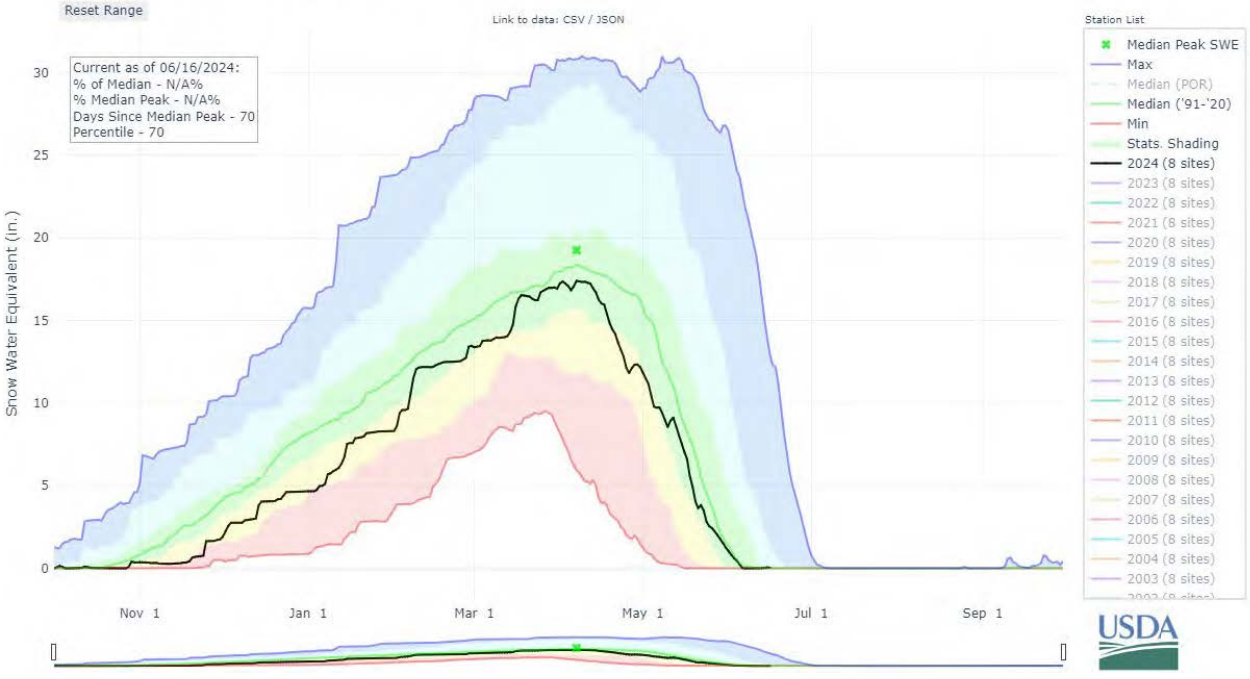

Snow Water Equivalent
Percent NRCS 1991-2020 Median
April 1, 2024, end of day
Cheyenne
Fort Collins
Greeley
Longmont
Boulder
Denver
UNITED S
EAST TAVAPUTS PLATEAU
Grand Junction
Mt Elbert
Colorado Springs
WEST ELK MOUNTAIN
Mt Peale
COLORADO
Pueblo
Arkansas
Garden Ci
SAN LUIS VALLEY
Liberal
Farmington
Percent NRCS 1991-2020 Median
≥ 150%
130% - 149%
110% - 129%
90% - 109%
70% - 89%
50% - 69%
< 50%
Observation missing
Median is zero
Median missing
USDA
Natural Resources Conservation Service
United States Department of Agriculture
N
Miles
0 10 20 40 60 80 100
Created 7-30-2024

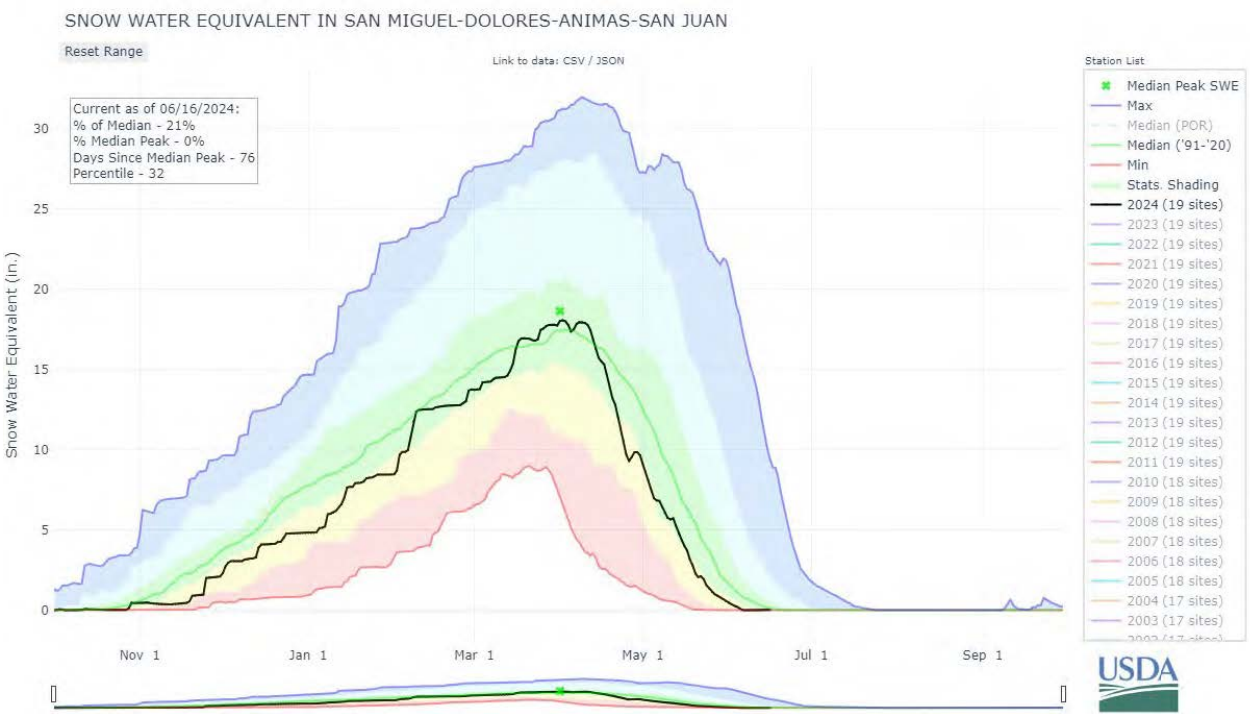

Westwide SNOTEL Current Snow Water Equivalent (SWE) % of Normal
Apr 01, 2023
Current Snow Water Equivalent (SWE) Basin-wide Percent of 1991-2020 Median
unavailable *
<50%
50 - 69%
70 - 89%
90 - 109%
110 - 129%
130 - 149%
>= 150%
* Data unavailable at time of posting or measurement is not representative at this time of year
Provisional data subject to revision
USDA
NRCS
0 75 150 300 Miles
The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).
Prepared by:
USDA/NRCS National Water and Climate Center
Portland, Oregon
https://www.nrcs.usda.gov/wps/portal/wcc/home/

RED MOUNTAIN PASS, CO (713) SNOW WATER EQUIVALENT



SNOW WATER EQUIVALENT IN ANIMAS





Above: Most Colorado watersheds attained an average or better snowpack by April 1st, and was added to by the plentiful snow/rain in June. The two basins that struggled the most was the South Platte and Arkansas, but nonetheless they attained a near normal peak SWE.

Red Mountain Pass Snotel Snowmelt Season Summary Data
1981-2010 Median Peak SWE is 24.6" on April 26
1991-2020 Median Peak SWE is 25.3" on April 26th

	Date Peak SWE	Peak SWE	% Median Peak SWE	Days to SAG	Period Add Precip	Period Mean Temp C	Adjusted Daily Mean Loss SWE	Maximum 5-Day Moving Average of Daily Loss of SWE	DOS Post Peak SWE
WY 2006	4/8/2006	24.4	99%	50	1.2	3.1	0.51	1.36	4
WY 2007	5/9/2007	23.7	96%	34	1.7	4.7	0.75	1.28	1
WY 2008	4/14/2008	34.4	140%	66	4.3	2.9	0.59	1.56	4
WY 2009	4/19/2009	27.5	112%	37	1.8	4.3	0.79	1.34	2
WY 2010	4/8/2010	24.2	98%	54	3.7	1.5	0.52	1.62	5
WY 2011	5/22/2011	33.7	137%	33	1.4	6.8	1.06	1.74	2
WY 2012	3/22/2012	17.8	72%	57	2.2	2.2	0.35	0.86	7
WY 2013	4/26/2013	19.6	80%	28	0.8	2.8	0.73	1.24	2
WY 2014	5/2/2014	24.5	100%	40	3.1	4.5	0.69	1.72	1
WY 2015	5/26/2015	20.2	82%	25	2.1	2.6	0.89	1.26	0
WY 2016	5/3/2016	23.3	95%	41	3.1	5.0	0.64	2.1	0
WY 2017	4/5/2017	27.4	111%	67	5.3	0.2	0.49	1.18	1
WY 2018	4/26/2018	16.4	67%	34	1.0	5.0	0.51	1.12	1
WY 2019	5/3/2019	36.4	148%	64	5.2	4.9	0.65	1.64	3
WY 2020	4/25/2020	24.5	100%	44	1.2	6.0	0.58	0.90	0
WY 2021	4/2/2021	21.1	86%	71	5.6	4.0	0.38	1.36	3
WY 2022	3/31/2022	19.9	79%	50	2.5	1.8	0.45	1.14	8
WY 2023	4/29/2023	31.1	123%	52	3.5	4.4	0.67	1.04	0
WY 2024	4/12/2024	21.8	86%	55	4.2	2.0	0.37	1.22	1
Means		24.8	1.0	47.5	2.8	3.6	0.6	1.4	2.4
Max	05/26/15	36.4	1.5	71.0	5.6	6.8	1.1	2.1	8.0
Min	03/22/12	16.4	0.7	25.0	0.8	0.2	0.4	0.9	0.0
Range	65	20.0	0.8	46.0	4.8	6.6	0.7	1.2	8.0
Median	April 25	24.2	1.0	50.0	2.5	4.0	0.6	1.3	2.0
Std Dev'n		5.7	0.2	13.8	1.5	1.7	0.2	0.3	2.3
CV		0.23	0.23	0.29	0.54	0.47	0.30	0.23	0.99

Above: Annual statistics for individual SNOTEL stations tracked by the CODOS Program.

Below: Summary statistics for individual SNOTEL stations.

CODOS and Other Selected SNOTEL Sites - Water Years 2006-2024 Snowmelt Seasons Summary Data

SNOTEL Site	Single Yr Max Days to SAG	Single Yr Min Days to SAG	Range Days to SAG	Single Yr Max Adjusted Mean Daily Loss SWE	Single Yr Min Adjusted Mean Daily Loss SWE	Range Mean Daily Loss SWE	Single Yr Max 5-Day Moving Average Daily Loss SWE	Single Yr Min 5-Day Moving Average Daily Loss SWE	Range 5-Day Moving Average Daily Loss SWE
Red Mtn Pass	71	25	46	1.1	0.4	0.7	2.1	0.9	1.2
Slumgullion Pass	66	22	44	0.7	0.3	0.4	1.4	0.7	0.7
Upper San Juan	80	28	52	0.9	0.4	0.6	2.0	0.6	1.4
Wolf Creek Summit	100	40	60	1.1	0.3	0.7	2.2	0.8	1.5
Beartown	85	23	62	1.1	0.3	0.8	2.2	0.4	1.8
Lizard Head	74	22	52	0.9	0.3	0.7	1.8	0.4	1.5
Park Cone	47	17	30	0.6	0.2	0.3	1.2	0.3	0.9
Schofield Pass	89	32	57	1.6	0.4	1.2	2.4	0.4	2.0
McClure Pass	66	24	42	0.9	0.3	0.6	1.8	0.4	1.3
Independence Pass	63	23	40	0.8	0.3	0.4	1.6	0.3	1.3
Hoosier Pass	61	27	34	0.9	0.3	0.6	1.4	0.7	0.7
Grizzly Peak	64	20	44	0.9	0.3	0.6	1.5	0.3	1.2
Berthoud Summit	67	23	44	1.1	0.3	0.8	1.6	0.5	1.2
Willow Creek Pass	55	21	34	0.8	0.2	0.6	2.4	0.3	2.1
Rabbit Ears Pass	67	22	45	1.8	0.3	1.5	2.2	0.8	1.4
Mesa Lakes	63	26	37	0.8	0.3	0.5	1.5	0.3	1.2
Group Max	100	40	62	1.8	0.4	1.5	2.4	0.9	2.1
Group Min	47	17	30	0.6	0.2	0.3	1.2	0.3	0.7
Group Range	53	23	32	1.2	0.2	1.2	1.2	0.6	1.4

Adjusted Daily Mean Loss SWE rates include additional SWE received after date of Peak SWE
Non-CODOS SNOTEL site names shown in italics

Below: Summary data for WY2024 at the 16 SNOTEL stations that CODOS monitors. The table shows peak SWE, and calculated from the day of peak SWE, melt rates, days to snow-all-gone, and mean temperature. Hoosier and Park Cone won the prize at 123% and 130% of normal. Most sites were near normal. Red Mt Pass and Wolf creek came in on the low end.

CODOS and Other SNOTEL Sites - WY 2024 Snowmelt Season Summary Data

	Date Peak SWE	Peak SWE	% Median Peak SWE	Days to SAG	Post-Peak Added SWE	Period Mean Temp C	Adjusted Daily Mean Loss of SWE	Maximum 5-Day Moving Average of Daily Loss of SWE	SBBSA DOS Post Peak SWE
Red Mtn Pass	4/12/2024	21.8	86%	55	4.2	2.0	0.4	1.2	1
Slumgullion Pass	4/12/2024	13.4	92%	44	3.6	0.6	0.3	0.9	1
Upper San Juan	4/11/2024	25.8	*90%*	*43**					
Wolf Creek Summit	4/3/2024	28.3	82%	53	3.4	2.1	0.6	1.4	2
Beartown	4/12/2024	22.7	104%	39	3.0	1.8	0.66	0.53	1
Lizard Head	4/1/2024	16.2	108%	46	2.3	1.9	0.4	0.4	2
Park Cone	4/12/2024	12.7	130%	43	4.3	3.4	0.3	0.3	1
Schofield Pass									
McClure Pass	4/3/2024	15.0	94%	36	3.1	4.7	0.4	0.4	2
Independence Pass	4/13/2024	17.8	107%	50	1.0	1.0	0.4	0.3	1
Hoosier Pass	5/15/2024	20.9	123%	29	0.8	6.5	0.72	0.72	0
Grizzly Peak	5/13/2024	18.7	101%	27	0.8	5.3	0.69	0.70	0
Berthoud Summit	4/29/2024	24	109%	44	4.0	4.5	0.55	0.56	1
Willow Creek Pass	5/10/2024	16.2	104%	27	0.6	4.8	0.6	1.2	0
Rabbit Ears Pass	4/11/2024	29.0	105%	58	6.9	4.6	0.5	1.4	1
Mesa Lakes	4/4/2024	16.1	90%	51	3.8	2.8	0.3	0.3	2
Mean	04/16/24	19.9	102%	43	3.0	3.3	0.5	0.7	1.1
Max	05/15/24	29.0	130%	58	6.9	6.5	0.7	1.4	2.0
Min	04/01/24	12.7	82%	27	0.6	0.6	0.3	0.3	0.0
Range	79	16.3	48%	31	6.3	5.9	0.4	1.1	2.0

Adjusted Daily Mean Loss SWE rates include additional SWE received after date of Peak SWE
Non-CODOS SNOTEL sites shown in italics
** Estimated*

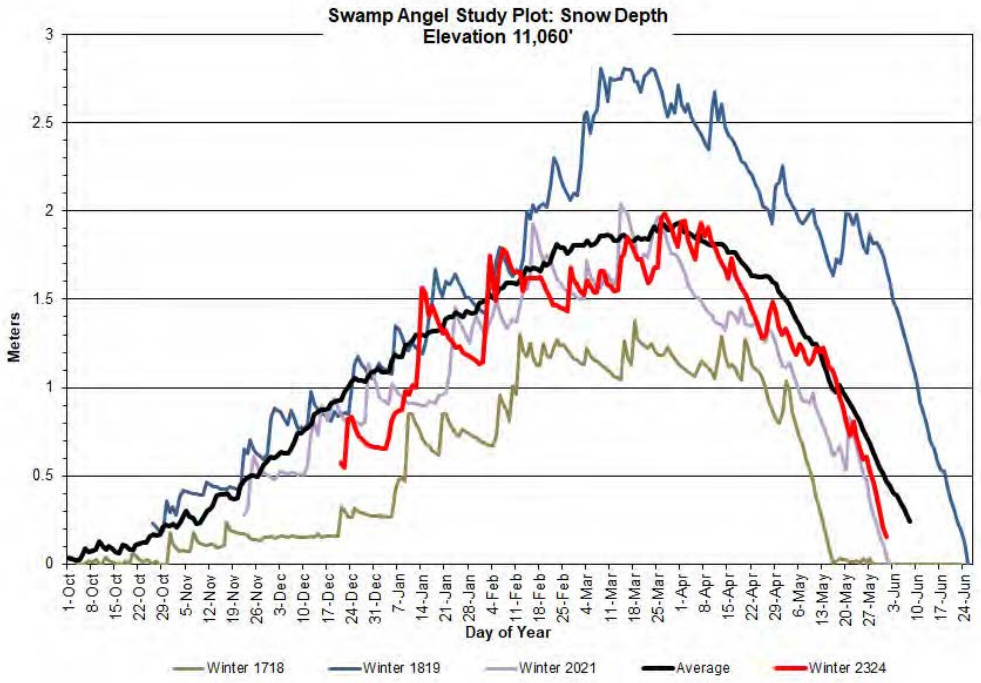
Below: A summary of WY 2006-2024 snowmelt rates and associated conditions at the 16 SNOTEL stations that CODOS routinely monitors. Days to SAG refers to the time between peak SWE and "snow all gone" at the SNOTEL sites. Adjusted Daily Mean Loss calculates the rate of snowmelt following peak SWE, including all precipitation received after peak SWE (assumed to be snow). Melt rate tables are presented for each of the 11 CODOS monitoring sites on their webpages.

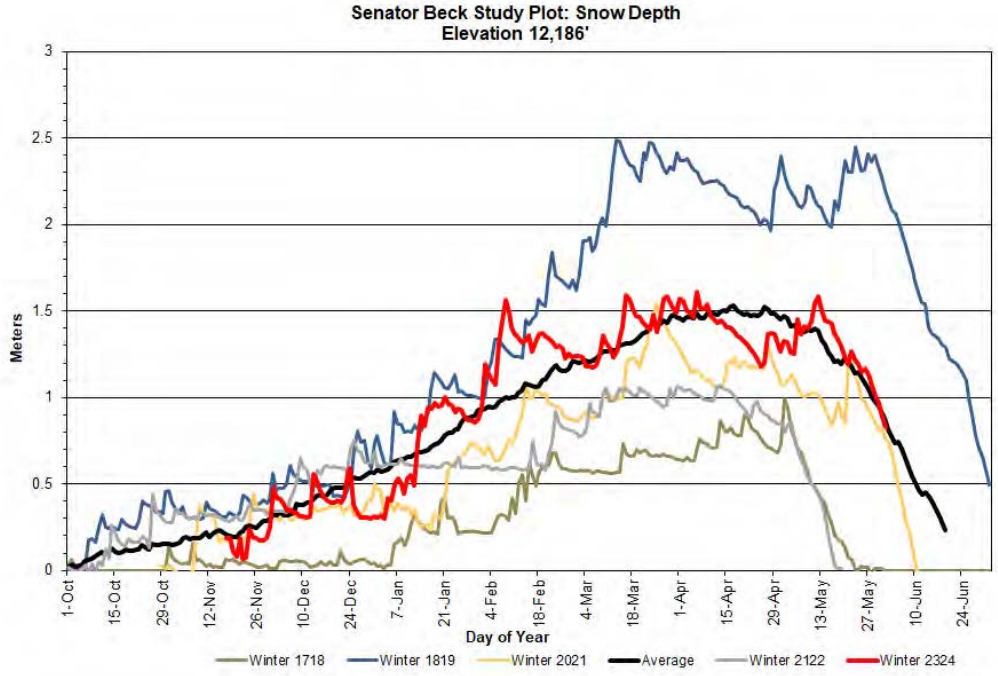
Group mean peak SWE was about average. The adjusted daily loss of SWE was on the low end. Days to snow-all-gone was in the middle of road.

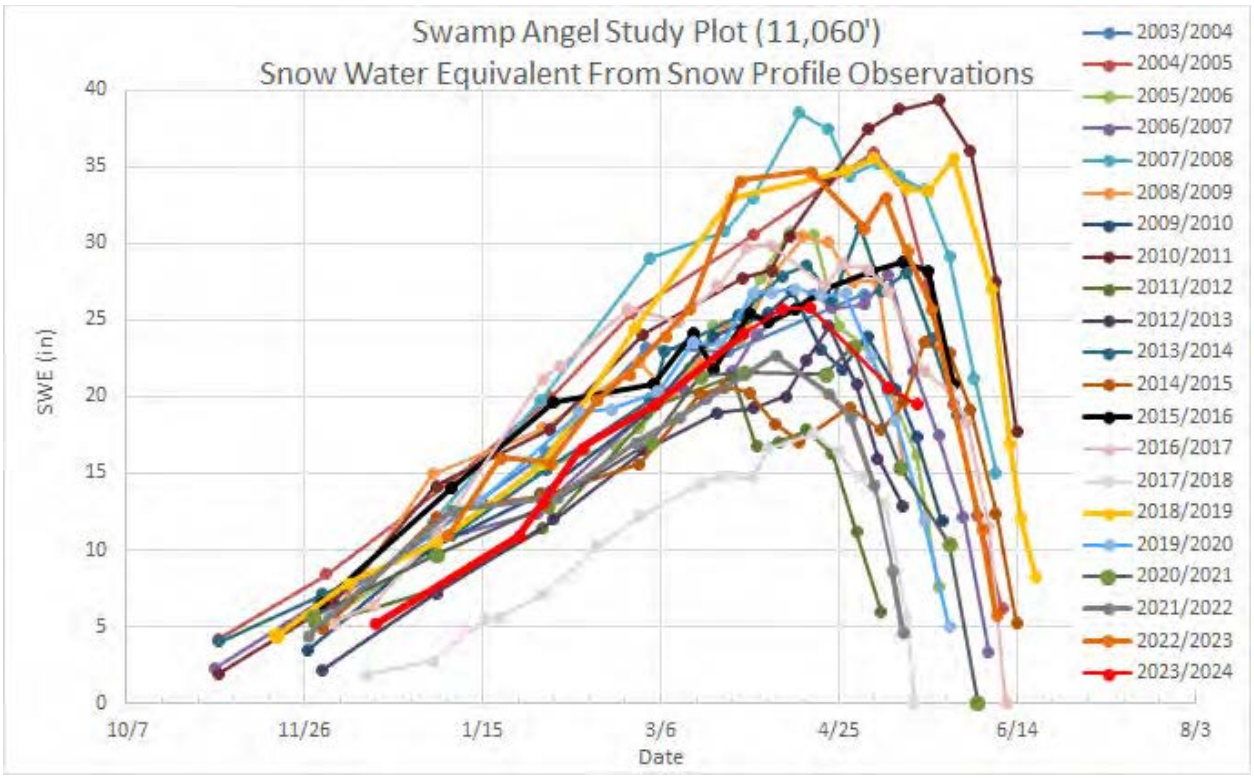
Aggregated CODOS and Other SNOTEL Sites - Snowmelt Season Summary Data WY 2006 through WY 2024
16 total sites

	Group Mean Date Peak SWE	Group Mean Peak SWE	Group Mean Days to SAG	Group Mean Post-Peak Added SWE	Group Mean Adjusted Daily Mean Loss SWE	Group Mean of Max 5-Day Moving Average Daily Loss SWE	Group Mean Period Mean Temp C	Recorded SBB Dust Events
WY 2006	4/11/06	21.0	40	1.8	0.56	1.2	3.4	8
WY 2007	4/18/07	18.0	38	3.2	0.57	1.2	3.7	8
WY 2008	4/18/08	29.3	53	4.0	0.63	1.4	3.4	7
WY 2009	4/17/09	23.7	36	2.7	0.75	1.4	4.4	12
WY 2010	4/16/10	19.6	43	3.3	0.58	1.3	3.1	9
WY 2011	5/3/11	29.0	43	3.7	0.79	1.7	5.3	11
WY 2012	3/21/12	13.6	46	2.3	0.35	0.9	2.8	12
WY 2013	4/23/13	18.0	32	0.9	0.60	0.6	4.4	10
WY 2014	4/14/14	22.9	49	4.6	0.58	1.4	3.4	9
WY 2015	4/12/15	16.1	52	6.5	0.51	1.1	3.6	3
WY 2016	4/20/16	20.7	44	3.8	0.58	1.4	4.1	6
WY 2017	4/8/17	25.6	56	4.9	0.55	1.3	3.5	4
WY 2018	3/22/18	15.7	35	1.9	0.51	1.0	4.6	8
WY 2019	4/19/19	28.4	61	7.1	0.57	1.5	4.2	4
WY 2020	4/16/20	20.8	37	1.1	0.59	1.2	5.2	3
WY 2021	4/8/21	17.7	49	3.4	0.43	0.4	3.6	7
WY 2022	4/14/22	19.5	41	2.4	0.55	0.6	3.8	11
WY 2023	4/19/23	27.7	45	3.6	0.76	1.1	4.0	6
WY 2024	4/16/24	19.9	43	3.8	0.48	0.7	2.8	5
Max	05/03/11	29.3	60.9	7.1	0.8	1.7	5.3	12.0
Min	03/21/12	13.6	32.3	0.9	0.3	0.4	2.8	3.0
Range	54	15.7	28.7	6.2	0.4	1.3	2.5	9.0

Adjusted Daily Mean Loss SWE rates include additional SWE received after date of Peak SWE


Swamp Angel Study Plot: Snow Depth
Elevation 11,060'
Meters
Day of Year
Winter 1718
Winter 1819
Winter 2021
Average
Winter 2324


Senator Beck Study Plot: Snow Depth
Elevation 12,186'
Meters
Day of Year
Winter 1718
Winter 1819
Winter 2021
Average
Winter 2122
Winter 2324


Swamp Angel Study Plot (11,060')
Snow Water Equivalent From Snow Profile Observations
SWE (in)
Date
0
5
10
15
20
25
30
35
40
10/7
11/26
1/15
3/6
4/25
6/14
8/3
2003/2004
2004/2005
2005/2006
2006/2007
2007/2008
2008/2009
2009/2010
2010/2011
2011/2012
2012/2013
2013/2014
2014/2015
2015/2016
2016/2017
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2018/2019
2019/2020
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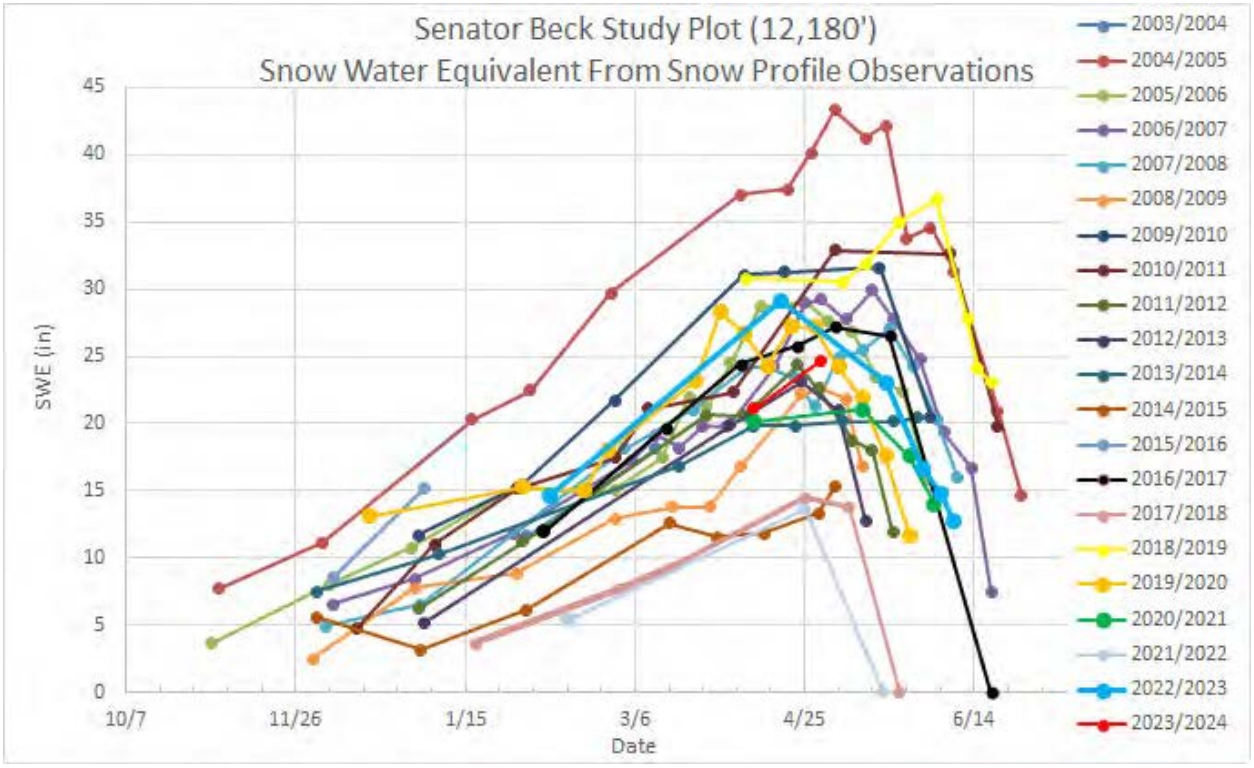
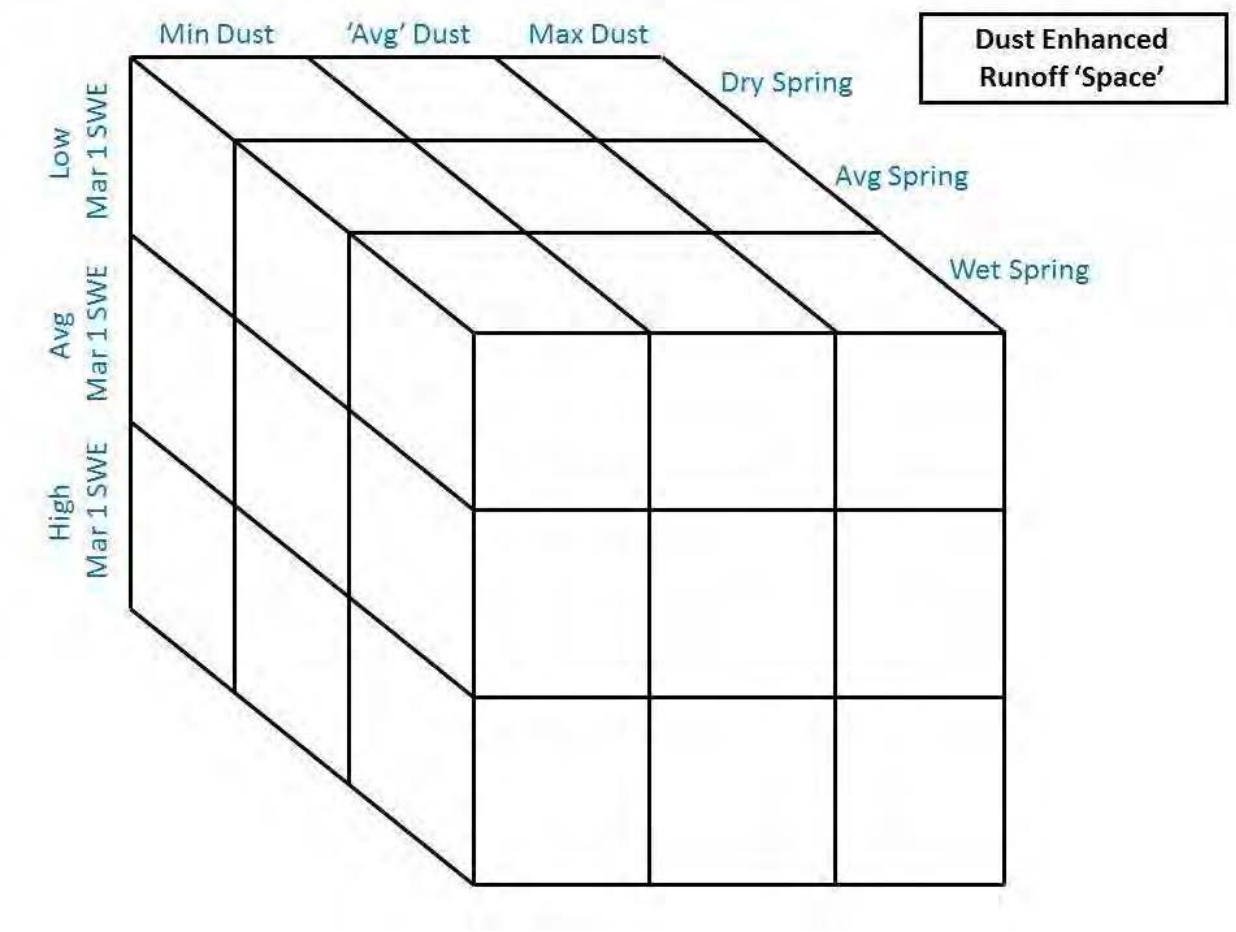
2021/2022
2022/2023
2023/2024


Senator Beck Study Plot (12,180')
Snow Water Equivalent From Snow Profile Observations
SWE (in)
Date
0
5
10
15
20
25
30
35
40
45
10/7
11/26
1/15
3/6
4/25
6/14
2003/2004
2004/2005
2005/2006
2006/2007
2007/2008
2008/2009
2009/2010
2010/2011
2011/2012
2012/2013
2013/2014
2014/2015
2015/2016
2016/2017
2017/2018
2018/2019
2019/2020
2020/2021
2021/2022
2022/2023
2023/2024

DUST-ON-SNOW CONDITIONS

DUST ENHANCED RUNOFF CLASSIFICATION:

In Water Year 2015 CODOS introduced a Dust Enhanced Runoff Classification (DERC) approach to linking dust-on-snow, snowpack, and spring weather conditions to patterns in statewide hydrographs within a 3x3x3 Dust Enhanced Runoff Space. The below table presents the final DERC classification of WY2024 parameters at each of the 20 stream gauges monitored by CODOS. Water Years 2006-2024 classifications are contained in Excel workbook Runoff_Space_by_Region_and_WY.xlsx. Another workbook, Runoff_Space_by_Watershed.xlsx, contains individual DERC analyses for WY 2006-2024 for each of the 20 stream gauges.



A conceptual Dust Enhanced Snowmelt Runoff Space integrating the interactions of March 1 SWE, dust intensity, and spring precipitation.

Current and prior seasons snowpack conditions, dust severity, and spring precipitation are mapped for individual DERC space along with the hydrographs. These analyses are presented in PDF format and are available for the watersheds listed below. Referencing these DERC spaces in spring is helpful to get and idea how spring runoff will possibly unfold.

- Animas River
- Blue River & Tarryall Creek
- Crystal River
- Dolores River
- Gunnison Watershed – East River
- Gunnison Watershed– Lake Fork
- Gunnison Watershed– Taylor Fork
- Gunnison Watershed – North Fork
- Gunnison Watershed – Muddy Creek
- Grand Mesa Watersheds
- Rio Grande
- San Juan River
- San Miguel River
- Snake River
- Upper Colorado Watershed –CO River
- Upper Colorado Watershed – Fraser River
- Yampa River

Below: Based on the discussions describing the DERC approach in characterizing the watersheds that CODOS monitors, WY2024 snowmelt season conditions are summarized in the tables below. Essentially, Colorado WY2024 snowpack and snowmelt runoff behaviors were mostly average with a number of wetter and drier areas. Dust severity was about average throughout Colorado but a relatively wet spring largely kept dust on the snow surface covered pushing runoff towards a more normal time period.

WY 2024

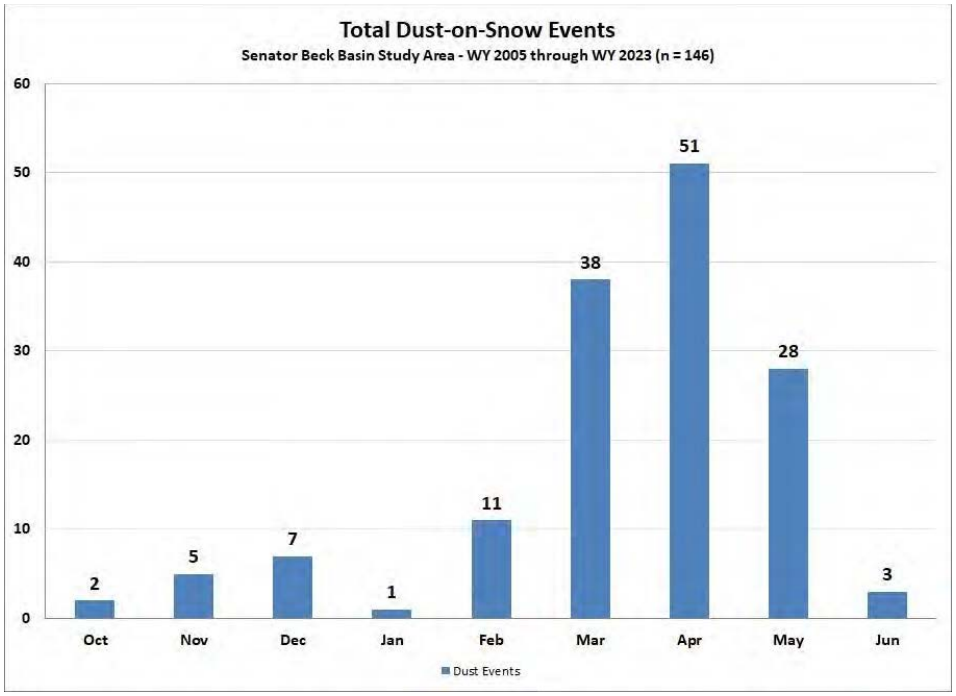
Distribution of instances within DERC matrix for the Water Year (n = 20 stream gauges)

		Dry Spring	Avg Spring	Wet Spring
LOW March 1 SWE	Min Dust			
	Avg Dust	Sa	La, Ri, Mu	
	Max Dust			
AVG March 1 SWE	Min Dust			
	Avg Dust	Do, Sm, Su, Pl	An, Unc, Ea, Sn, Co, Cr, No	Bl, Ta
	Max Dust			
HIGH March 1 SWE	Min Dust			
	Avg Dust		Fr, Ya	Tf
	Max Dust			

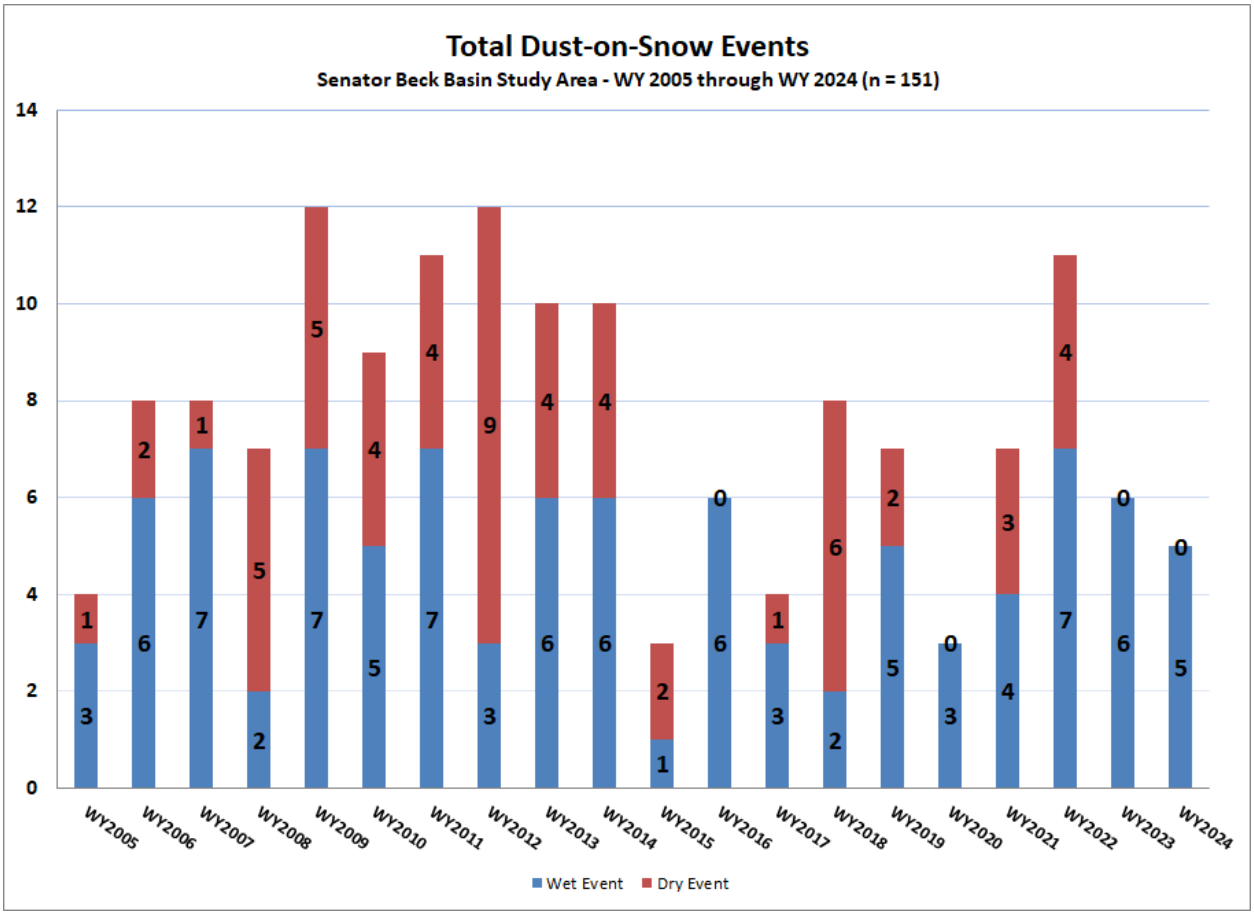
Key: An = Animas, Un = Uncompahgre, Do = Dolores, Tf = Taylor Fork, Ea = East River, La = Lake Fork
Key: Ri = Rio Grande, Sa = San Juan, Sm = San Miguel, Su = Surface Creek, Pl = Plateau Creek
Key: Bl = Blue River, Ta = Tarryall Creek, Sn = Snake River, Fr = Fraser River, Co = Upper Colorado River
Key: Ya = Yampa River, Cr = Crystal River, Mu = Muddy Creek, No = North Fork Gunnison

The Senator Beck Study Basin received 5 dust events this season, they occurred on February 26-27, March 2-3, March 30-31, April 5, and May 4-5. At the end of February (D1), we got reports of winds picking up around the Four Corners region with hazy skies and sand dunes developing on the roads, so we were expecting the dust that settled on the snowpack. Up at Swamp Angel, the dust was relatively light in severity and landed with about 8.5" of snow accumulation. However, the winds only strengthened and on March 2-3rd (D2) we had a much bigger, more widespread dust "wallop." This wallop happened right at the start of the melt season, and while the storm also brought in some more snow accumulation, there was no doubt it would

affect the remainder of the snow season. Our CODOS tour on March 15th found a wide range of variability in the dust layers. The San Juans from the Dolores to the Rio Grande were hit hard, with decreasing severity from Hoosier Pass north to Loveland. The dust was very mild at Grand Mesa and Park Cone, yet severe at McClure Pass and the Roaring Fork region. New precipitation buried the D2 dust layer under about a foot of snow at Swamp Angel. Our third dust event around March 30th (D3) was light with light precip, and a week later a bigger wind storm ushered in our fourth, April 5 (D4), which was initiated in the Four Corners region with sustained high winds from April 5-7th. D4 settled 4.5" below the snow surface at Swamp Angel (we dug a pit on April 9th). Our April CODOS tour happened on April 22 and found some consistency among the dust layers throughout the Colorado Mountains. D1 and D2 merged and were found approximately 1-2' under the snow surface. The second dust layer, D3 and D4, was under approximately 5" of recent new snow accumulation towards the Eastern and Northern sites, and at the surface towards the Southern and other shallow snowpack sites (McClure, Spring Creek, Park Cone, Willow Creek). At this point in April, we began to see sunny, clear weather, and big time melt, setting new SNOTEL records on 14-day loss-of-SWE events. The dust was average except for the Roaring Fork region where it was severe. Luckily, May brought cooler temps and precipitation. On the 8th of May (D5), our last dust storm of the season was brought in with 100 mph winds at Putney Station and more precip. Our May CODOS tour was conducted right after a fresh blanket of snow, where we saw recovery in many regions despite a blistering end of April. The fresh snow in May kept the dust buried for a bit longer, prolonging our nice near-average conditions for a few more days, but soon the dust layers surfaced and remained there for the rest of the melt. By June 1st, melt was in full swing with streamflow rising.

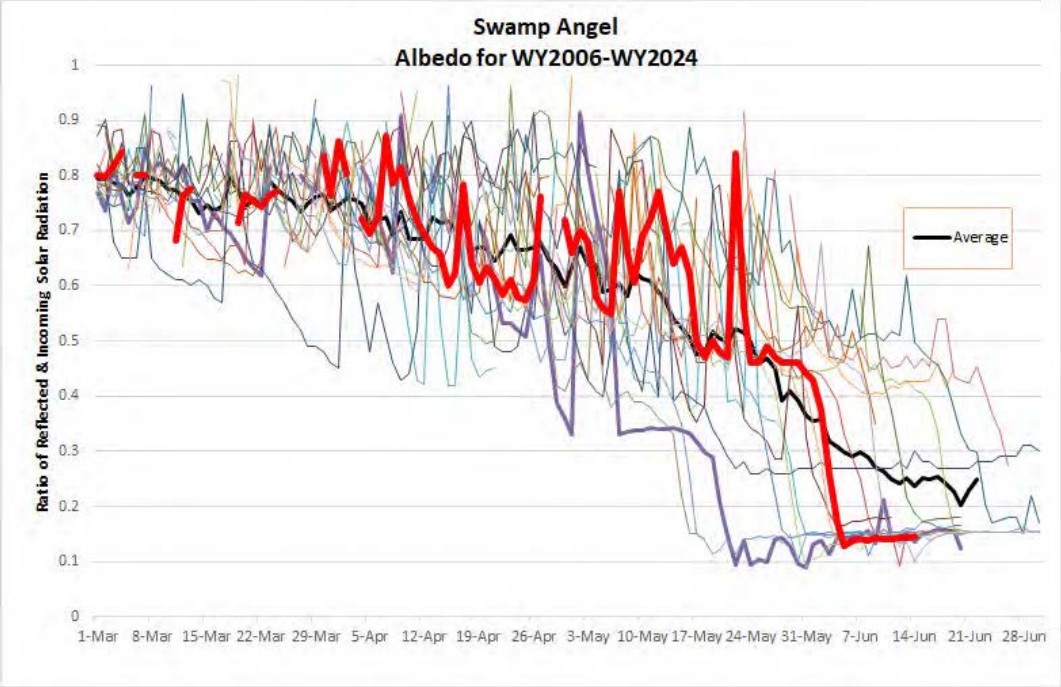


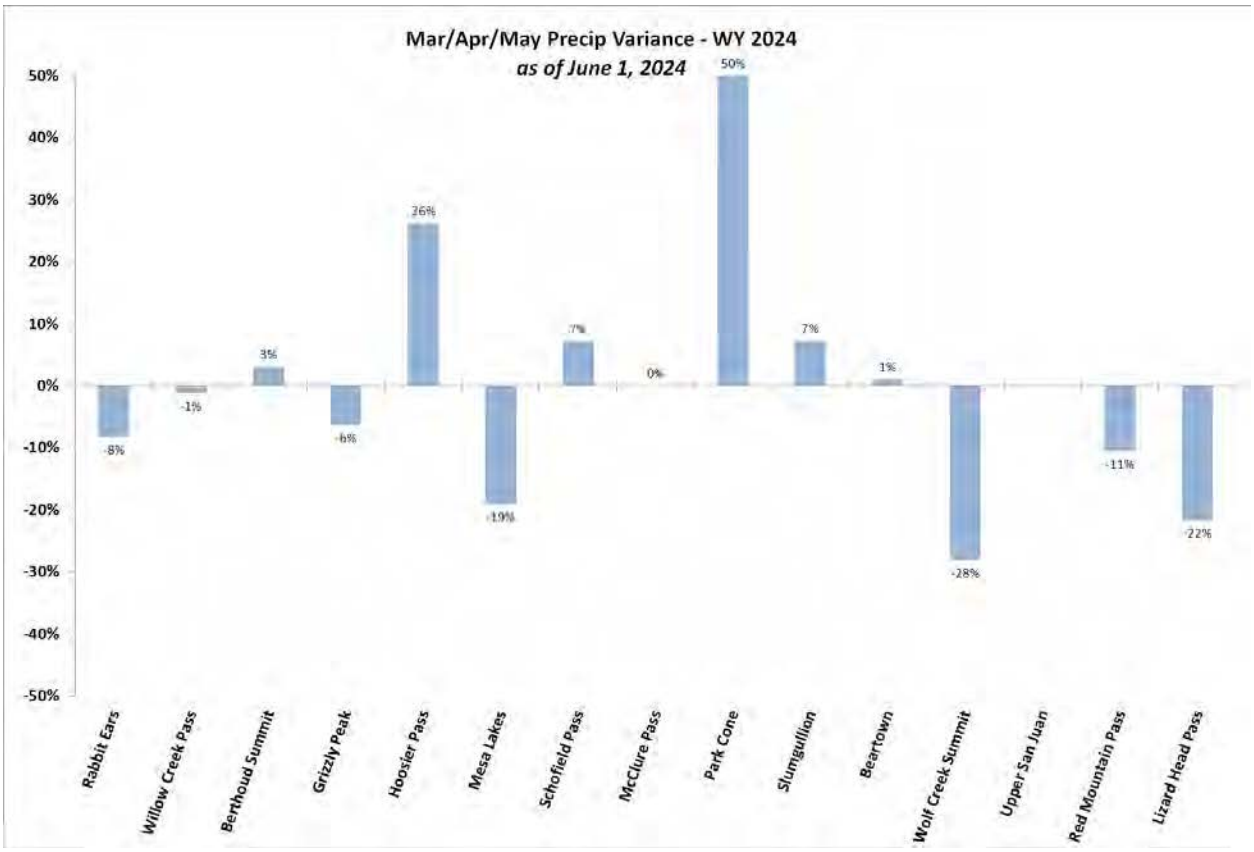
Above: Total dust-on-snow events by month. March begins the more intensive part of dust-on-snow season. In WY2024, we saw dust events occur February 26-27, March 2-3, March 30-31, April 5, and May 4-5



Above: Total dust-on-snow events by year. Five dust events in 2023/2024 were "wet" events and none were "dry" events. Wet means the dust came in with precipitation. Dry means it arrived without precipitation.

Below: Snow season albedo since 2006. Albedo can vary greatly depending on dust severity and precipitation events. WY2024 (red line) was "upper-end-of-average" for dust severity conditions at Senator Beck. Precipitation events were rather frequent in spring which helped keep fresh snow (as well as cloud cover) on the surface and minimizing dust radiative forcing. The storms the beginning of June are seen in the albedo spike before going to snow-all-gone a few days later. Also in bold is WY2009 - a notoriously bad dust year - for comparison.





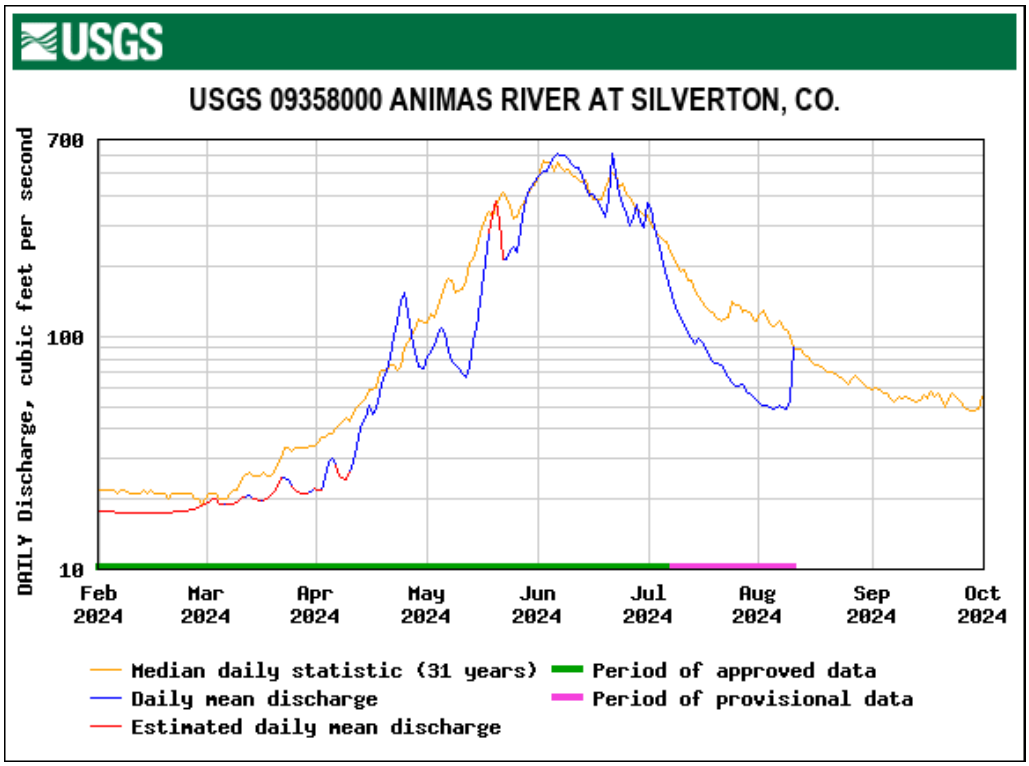
Above: Variance of combined March, April, and May precipitation for the SNOTEL stations adjacent to or near CODOS monitoring sites. This bar graph illustrates one reason why streamflows turned out the way they did. The 6 bars to the right are in the San Juan Mountains.

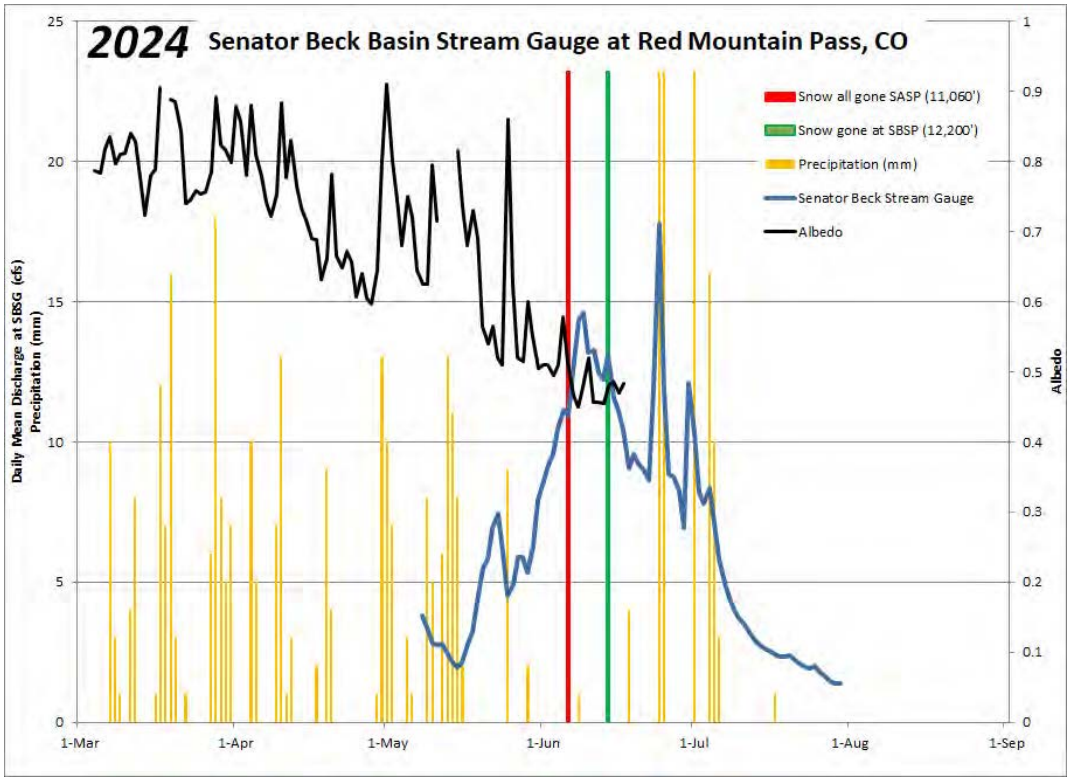
RUNOFF BEHAVIOR

Snowpack and dust-on-snow conditions set the stage for streamflow come springtime, and weather conditions dictate how it unfolds. This season, a notably dry, sunny, end of April played a big part kicking off the spring snowmelt across the state. On our April 22nd CODOS update, we noted that the most severe dust layer was around 1-2' deep in the deeper snowpack. The second dust layer (D3 and D4) undoubtedly played a role in the end-of-April melt – in the northern sites, this layer was under 5" of recent snow, and in the southern sites, this dust layer was effectively at the surface. Nearly all the hydrographs we monitor in Colorado showed a spike in streamflow at the end of April, some bigger than others, and then we saw some differing behaviors mainly divided between the northern and southern river basins.

The northern Colorado rivers fared better recovering after the big SWE dive of late April 2024. While the hydrographs showed end of April streamflow spikes with varying degrees due to warm, sunny weather conditions and near-surface dust, they tapered at the beginning of May while the northern mountains received a significant amount of new snow and albedo reset, staving off the moment when the dust layers would emerge at the surface of the snowpack. On May 1st, percent SWE NRCS average of the basins were as follows: North Platte – 95%, South Platte – 103%, White-Yampa – 95%, Arkansas – 76%, Upper Colorado Headwaters – 91%. By May 15th, percent average SWE in these basins jumped to: North Platte – 115%, South Platte – 126%, White-Yampa – 109%, Arkansas – 118%, Colorado Headwaters – 108%. Most of the hydrographs from the northern basins showed peak flows above average around early June.

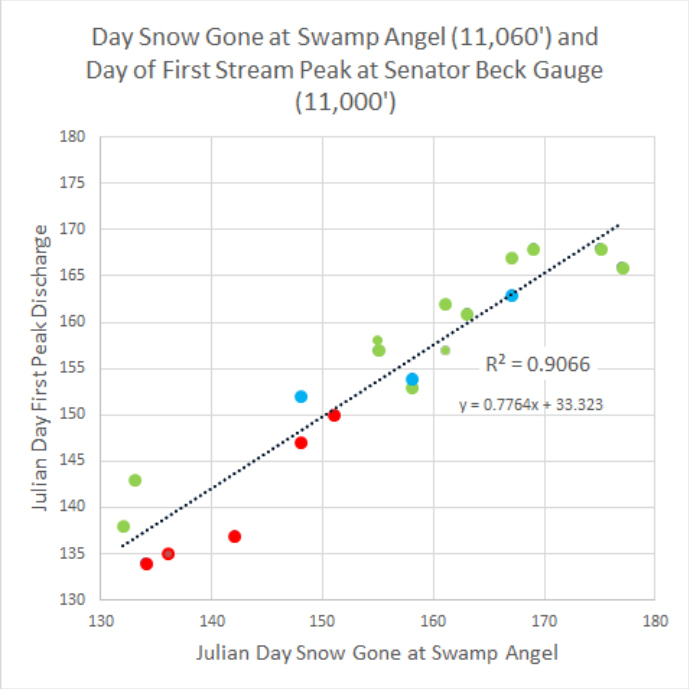
In the lower basins, the end of April SWE dive recovery didn't play out quite the same. At the end of April, the Dolores, Gunnison, and Upper San Juan basins dropped from near normal SWE conditions to in the 60% of average conditions – a record loss of SWE, in part fueled by the surface dust layer we observed on April 22nd. By May 1st, conditions were: Upper Colorado/Dolores – 59%, Gunnison – 67%, Upper San Juan – 68%. May 15, the Gunnison River basin recovered to 89% of average, but the other two southern river basins did not. The difference was, the southern mountains just didn't see the kind of added SWE needed to sustain flows and delay the emergence of the spring dust layers. After big melt spike in the hydrographs, the southern basins saw near-average to below-average streamflow peaks, and below average end of summer flows. The Gunnison river basin saw a good bump of precip early/mid May which kept flows up for a bit longer than the Upper San Juan and the Dolores. The Yampa River peaked at 4370 cfs on June 8, the Roaring Fork peaked at 1050 cfs on June 9, the Arkansas River peaked at 4710 cfs on June 10, the Dolores 1470 cfs on May 20, Animas was at 3510 cfs on June 7, the Gunnison peaked at 4210 cfs on June 9 and the Uncompahgre had multiple spikes of streamflow due to summers rains, higher than the snowmelt peak: 1370 cfs on June 28, 1440 cfs on August 12.





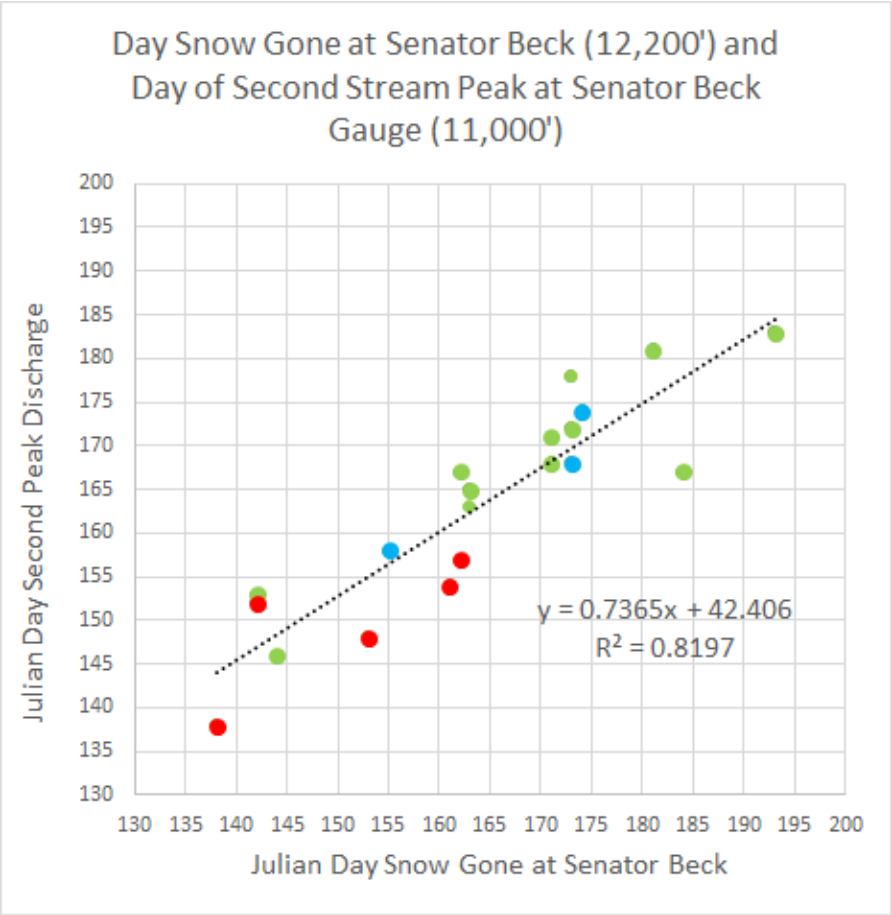
Above: It was a multi-peak season as recorded by many stream gauges. The snowpack kicked into the melt phase rapidly due to a dry and sunny April fueled by lots of dust on the snow surface. Added to this, wet (snow and rain) conditions brought more water to the mountains, at

the same time dampened snowmelt rates due to hampered incoming solar radiation, all made for complexities that made it more difficult to forecast timing of streamflows. Peak discharge at Senator Beck stream gauge was June 6, reflecting the ~11,000' elevation zone melt out, and June 22 for the high elevation, above 12,200' melt.



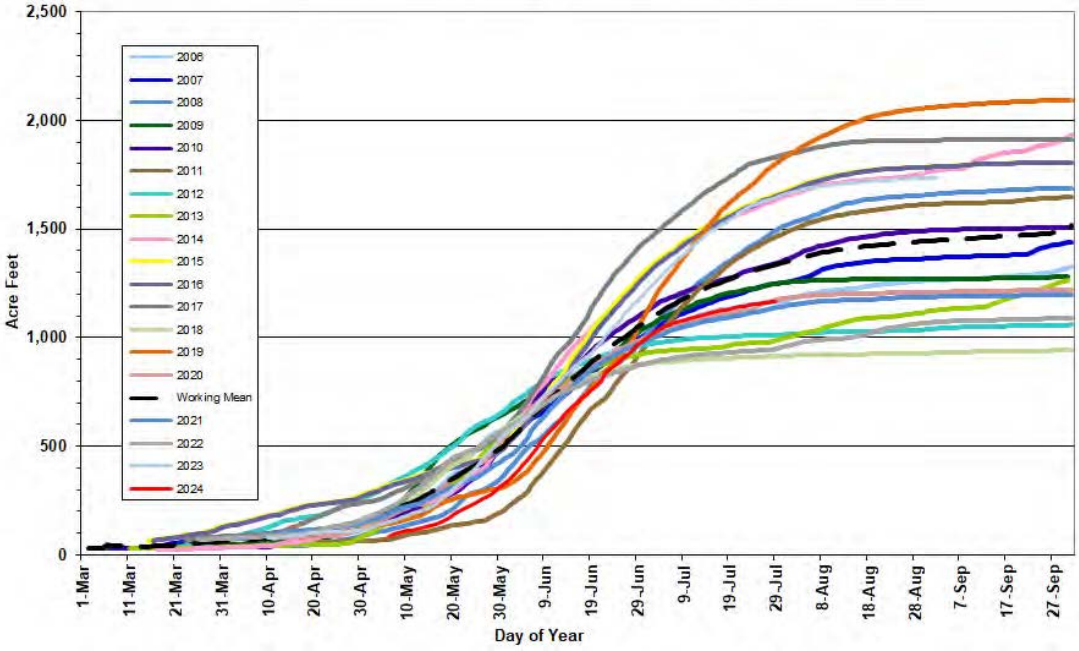
Above: Correlation of snow-all-gone at SASP and peak Q at the adjacent Senator Beck streamgauge. All the severe dust years in red show SAG and peak discharge before June 1. Low dust years are shown in blue and average in green. The two years in green at lower left make sense as this was 2012 and 2018, two notorious low snow years (and dust severity was "upper-end-of average" for 2018).

Below: There is less correlation of the second streamflow peak Q with SAG at Senator Beck Study Plot (12,200') compared to SASP but still very informative.

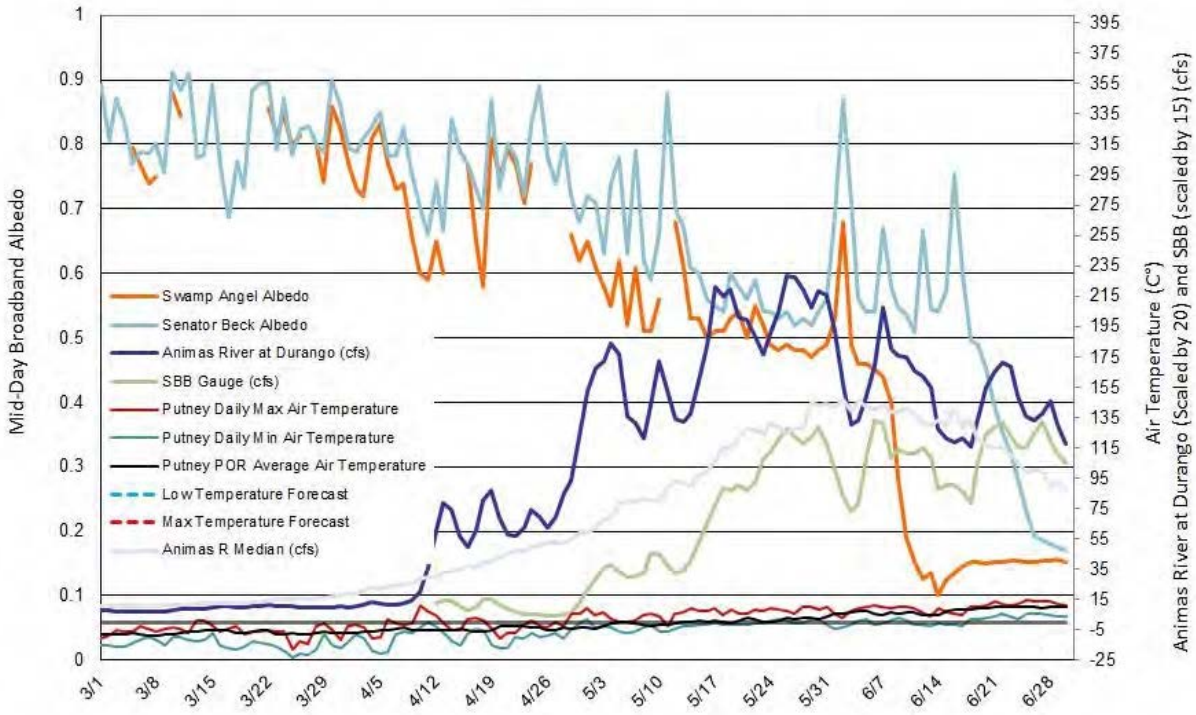


Senator Beck Basin Cumulative Discharge - 2006 to 2024

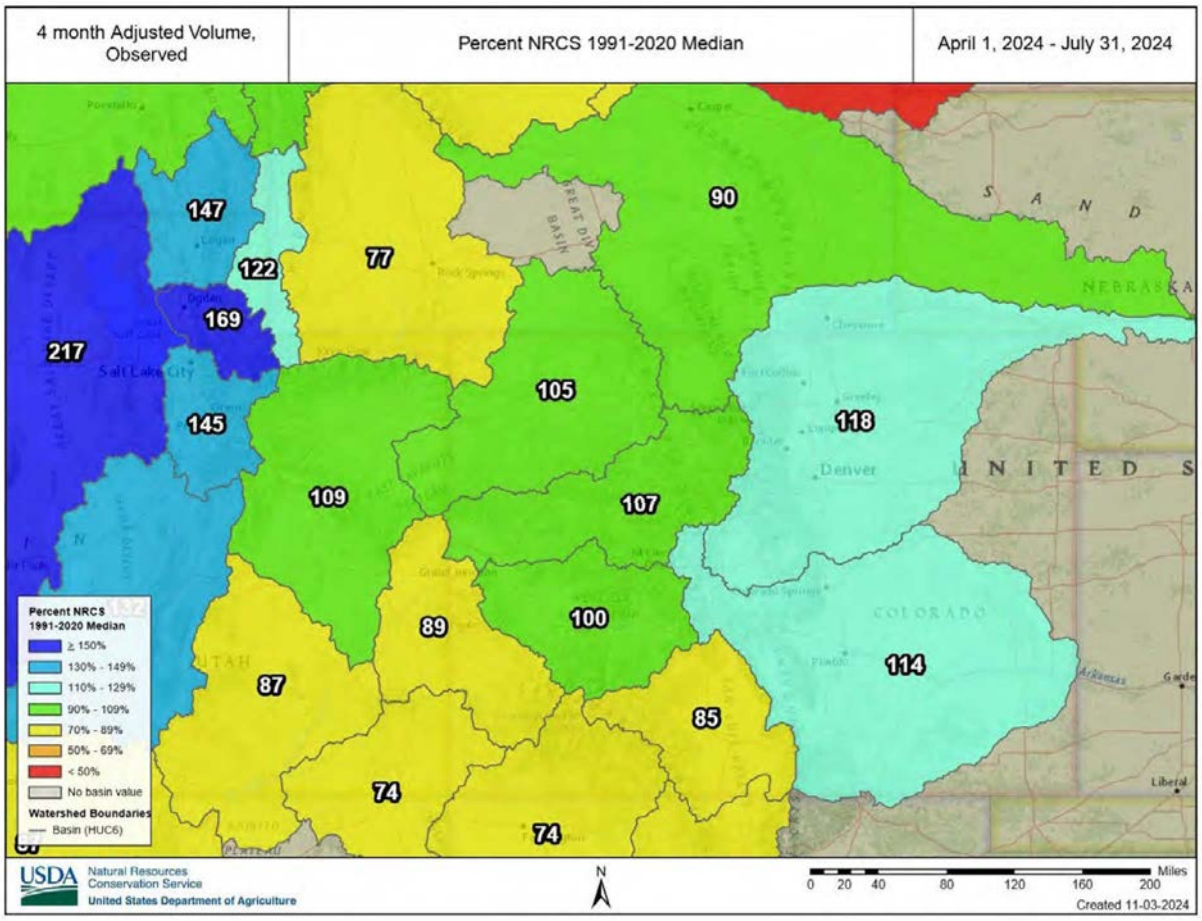
as measured at Senator Beck Stream Gauge (SBSG)



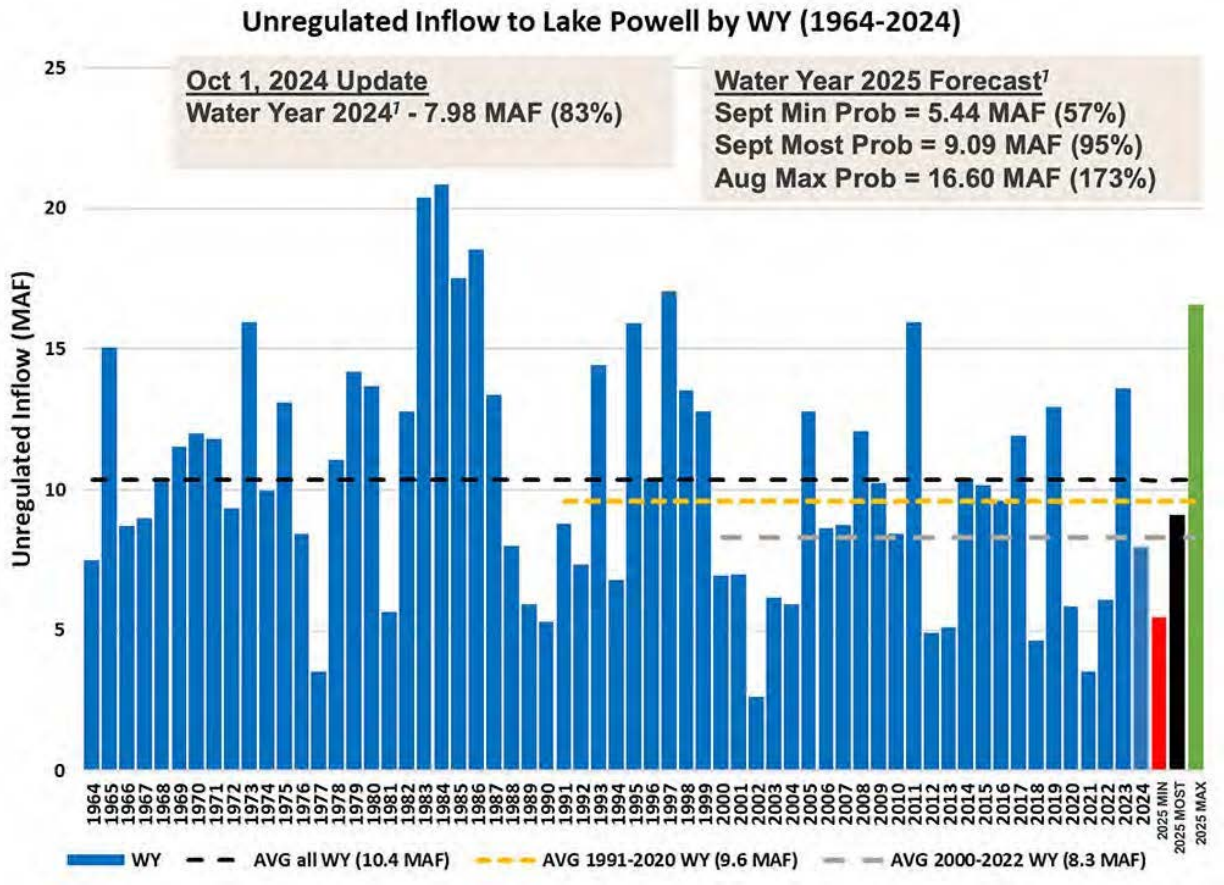
Animas at Durango and SBB Streamflow, Albedo, and Air Temperature
Spring 2023



Above: Stormy periods in spring made for extended high flows rather than just one major peak.



Below: Stream forecast issued on June 1. Low for the entire southwest. Northern Colorado better off than southern.



LOOKING AHEAD

As usual, we all want to know what ENSO conditions are like – it's a nice, familiar way to start trying to make sense of this coming winter's forecast, despite its unreliability. From the NOAA blog, a nice reminder of the ENSO basics: "Rising warm air in the tropics is what drives global atmospheric circulation, and therefore the jet stream, storm tracks, and resulting temperature and rain patterns. ENSO's varying sea surface temperature changes where the strongest rising air motion occurs, hence changing global atmospheric circulation." We currently have near-to-below average sea surface temperatures in the Pacific, consistent with neutral-ENSO conditions. As we hit December, there's a 62% probability of La Nina developing and a 59% probability of returning to ENSO neutral conditions by March 2025. However, the Nina is not predicted to be very strong – in fact we have a weak, short-duration likelihood of a La Nina winter. So, with minimal ENSO influence, other climate and weather factors could play a larger role.

While unpopular, NOAA seasonal outlook for Oct-Dec suggest below-average precipitation for most of Colorado, and above average temperatures for entire region (60-70% or the Four Corners region). In fact, most of the winter is along those lines. November-January seasonal outlook favors above-normal seasonal mean temperatures and generally below-average precipitation, though parts of the northern Rockies might be slightly above.

In terms of other climate and weather phenomena, let's keep an eye our for some atmospheric rivers from the eastern Pacific. Like the jet stream, ARs move southward throughout the winter. If we get a good stream of moisture that misses the Sierra's and heads inland, it could be grand! There's about a 30% chance of inland precipitation this season as a result of atmospheric rivers, so here's hopin'.