



**UPPER EAGLE REGIONAL
WATER AUTHORITY**

M E M O R A N D U M

TO: Board of Directors
FROM: Diane Johnson, Communications & Public Affairs Manager
DATE: January 20, 2022
RE: January 27, 2022, Board Meeting

GOVERNED BY:

The Metropolitan
Districts of:
Arrowhead
Beaver Creek
Berry Creek
EagleVail
Edwards

The Town of Avon

This memorandum shall serve as notice of the Regular Meeting of the Board of Directors of the Upper Eagle Regional Water Authority:

**Thursday, January 27, 2022
8:30 a.m.**

This meeting will be held via Microsoft Teams

Call-in information is available prior to the meeting by emailing info@erwsd.org.

C:
ERWSD Managers

Board Materials via Email:
Caroline Bradford, Independent Consultant
Steve Coyer, Mountain Star
Melissa Nelson, Berry Creek Metropolitan District
Bill Simmons, Beaver Creek Metropolitan District



**UPPER EAGLE REGIONAL
WATER AUTHORITY**

BOARD OF DIRECTORS REGULAR MEETING
Thursday, January 27, 2022
8:30 a.m.
Remote via Microsoft Teams

AGENDA

GOVERNED BY:

The Metropolitan
Districts of:
Arrowhead
Beaver Creek
Berry Creek
EagleVail
Edwards

The Town of Avon

- 1. Consultant/Guest Introduction**
- 2. Public Comment**
- 3. Action/Other Items**
 - 3.1. Minutes of Meetings – Approval or Modification**
 - 3.1.1. Minutes of Dec. 16, 2021, Regular Meeting
 - 3.1.2. Minutes of Dec. 16, 2021, Special Joint Meeting with ERWSD
 - 3.1.3. Minutes of Jan. 3, 2022, Special Joint Meeting with ERWSD
 - 3.1.4. Minutes of Jan. 10, 2022, Special Joint Meeting with ERWSD
 - 3.1.5. Minutes of Jan. 17, 2022, Special Joint Meeting with ERWSD
 - 3.2. Res. No. 2022-01: Resolution Designating Location to Post Notice – Diane Johnson**
 - 3.3. Information Reports**
 - 3.3.1. Development Report
 - 3.3.2. Board Committees
 - 3.3.3. Authority December Meeting Summary – draft
 - 3.3.4. Contract Log
- 4. Strategy Items**
 - 4.1. Board Member Input**
- 5. General Manager Report**
 - 5.1. General Manager Information Items – Acting GM David Norris**
 - 5.1.1. COVID-19 update
 - 5.2. Finance Report – David Norris**
 - 5.2.1. Quarterly Financials
 - 5.3. Operations Report – Siri Roman**
 - 5.3.1. Backflow Prevention and Cross Connection Control Program – Shane Swartwout
 - 5.3.2. 2020 Macroinvertebrate Sampling Results – Leah Cribari
 - 5.3.3. Molybdenum Rulemaking Update
 - 5.4. Engineering and Water Resources Report – Jason Cowles**
 - 5.4.1. Unallocated water update
 - 5.5. Communications and Public Affairs Report – Diane Johnson**
- 6. General Counsel Report – Kathryn Winn**
- 7. Water Counsel Report – Kristin Moseley**

☀ Action Item Attachment

* Informational Attachment

† Confidential Attachment

- Public comment of items not on the agenda is limited to three minutes per person on any particular subject for which public comment is accommodated, pursuant to §18-9-108, C.R.S.

8. Executive Session pursuant to §24-6-402(4)(b)(d) and (e), C.R.S.

- 8.1. Security improvements for board member access to packets – Justin Way
- 8.2. Water Counsel Review of Matters in Negotiation – Kristin Moseley
 - 8.2.1. Eagle River MOU update – Jason Cowles
- 8.3. General Counsel Review of Matters in Negotiation – Kathryn Winn†
 - 8.3.1. Unification Update

9. Adjournment

This is an all-remote meeting. For Microsoft Teams information to join the meeting, please contact info@erwsd.org prior to the meeting.



BOARD ACTION REQUEST

TO: Boards of Directors
FROM: Diane Johnson, Communications and Public Affairs Manager
DATE: January 27, 2022
RE: Res. No. 2022-01: Resolution Designating Location to Post Notice

Summary of Subject: Attached is a resolution that the board must adopt at the first regular board meeting of each year.

Discussion and Background: In December, the boards discussed a proposed 2022 regular meeting schedule, to include regular joint meetings, which is attached to the resolution as Exhibit A.

Alternatives: None.

Legal Issues: This is a statutory requirement.

Budget Implication: None

Recommendation: Adopt the resolution, with the exhibit.

Suggested Resolution and Motion: I move to approve Resolution No. 2022-01: Resolution Designating Location to Post Notice, with its attached Exhibit A of the 2022 regular meeting schedule.

Attached Supporting Documentation:

- **Resolution No. 2022-01:** Resolution Designating Location to Post Notice with Exhibit A

UPPER EAGLE REGIONAL WATER AUTHORITY

RESOLUTION NO. 2022-01

RESOLUTION DESIGNATING LOCATION TO POST NOTICE

WHEREAS, pursuant to §24-6-402(2)(c), notice and, where possible, the agenda of the Upper Eagle Regional Water Authority (“Authority”) Board of Directors (“Board”) meetings at which the adoption of any formal action is to occur or at which a majority or quorum of the body is in attendance, or is expected to be in attendance, shall be posted within the boundaries of the Authority at least 24 hours prior to each meeting at a location designated at the first regular meeting of each year.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Upper Eagle Regional Water Authority as follows:

Notices of meetings (regular, special, and work/study session) of the Board required pursuant to §24-6-401, *et seq.*, C.R.S., shall be posted at least 24 hours prior to each meeting at:

<https://www.erwsd.org/>

In the event of an exigent or emergency circumstance such as a power outage or an interruption in internet service, the Authority will post notice of public meetings at least 24 hours prior to a meeting at the following physical location within the boundaries of the Authority:

846 Forest Road
Vail, Colorado 81657

The schedule of regular meetings of the Authority for 2022 is attached hereto as Exhibit A and incorporated herein by this reference:

ADOPTED this 27th day of January 2022.

UPPER EAGLE REGIONAL WATER
AUTHORITY

By _____
George Gregory, Chair

ATTEST:

Kim Bell Williams, Secretary

2022 Board Meeting Schedules

Eagle River Water & Sanitation District Administrative Offices
846 Forest Road, Vail, CO 81657
Remote via Microsoft Teams or
Walter Kirch Conference Room

Upper Eagle Regional Water Authority

Board of Directors

meets at 8:30 a.m. on the fourth Thursday of each month

UERWA and ERWSD

Boards of Directors

meets at 11:00 a.m. on the fourth Thursday of each month

Eagle River Water & Sanitation District

Board of Directors

meets at 1:00 p.m. on the fourth Thursday of each month

Meetings held on the **fourth** Thursday of each month, unless otherwise noted

Date	UERWA Time	Joint Time	ERWSD Time
January 27	8:30 a.m.	11:00 a.m.	1:00 p.m.
February 24	8:30 a.m.	11:00 a.m.	1:00 p.m.
March 24	8:30 a.m.	11:00 a.m.	1:00 p.m.
April 28	8:30 a.m.	11:00 a.m.	1:00 p.m.
May 26	8:30 a.m.	11:00 a.m.	1:00 p.m.
June 23	8:30 a.m.	11:00 a.m.	1:00 p.m.
July 28	8:30 a.m.	11:00 a.m.	1:00 p.m.
August 25	8:30 a.m.	11:00 a.m.	1:00 p.m.
September 22	8:30 a.m.	11:00 a.m.	1:00 p.m.
October 27	8:30 a.m.	11:00 a.m.	1:00 p.m.
November 17†	8:30 a.m.	11:00 a.m.	1:00 p.m.
December 15†	8:30 a.m.	11:00 a.m.	1:00 p.m.

†Meeting scheduled for third Thursday

New Development Report						
January 2022						
Projects Requiring Water Rights Dedication		Type of Use	SFEs Proposed	Location	Projected Water Demand Annual Acre-Feet Augmentation (AF)	Development Approval Process Step:
	Authority					
	ECO School District Housing	Residential	37	Edwards	3.7	1. Connection Application
	Edwards River Park PUD	Mixed Use	440+com	Edwards	61.8	3. Cond. Capacity
	Mountain Hive	Residential	188	Edwards	10.5-15.2	3. Cond. Capacity
	NorthStar PUD Amendment	Commercial	TBD	Edwards	3.92	4. Water Rights
	Riverwalk Edwards Ammendment	Residential	18	Edwards	1.8	2. Water Analysis
	Vogelman Parcel (Carwash)	Mixed Use	1.5	Edwards	1.1-2.6	2. Water Analysis
	Warner Building 2 Conversion	Residential	13.25	Eagle-Vail	0.07	3. Cond. Capacity
	West End PUD Ammendment	Residential	335	Edwards	34.3	2. Water Analysis
	District					
	534 E Lionshead Circle - Elevation	Residential	12	Vail	0.49	2. Water Analysis
	500 E Lionshead Circle - Legacy	Residential	23	Vail	0.31	2. Water Analysis
	Alura (Miradoro)	Residential	10	Vail	0.83	1. Connection Application
Projects Under Construction	Authority					
	Avon Hotel Development	Commercial	85	Avon	--	2. Water Analysis
	CVC Clubhouse Residences	Residential	9	Edwards	1.34	6. Ability to Serve Letter
	140 W Beaver Creek Blvd	Residential	112	Avon	--	N/A
	185 Elk Track	Residential	4	Beaver Creek	--	N/A
	6 West Apartments (formerly Via)	Residential	120	Edwards	12.56	6. Ability to Serve Letter
	Fox Hollow Amended PUD	Mixed Use	108	Edwards	14	6. Ability to Serve Letter
	Frontgate	Mixed Use	84	Avon	2.6	6. Ability to Serve Letter
	Kudel Parcel	Residential	4	Edwards	2.4	6. Ability to Serve Letter
	Maverik Gas Station	Commercial	3	Avon	1.03	6. Ability to Serve Letter
	Piedmont	Residential	240	Avon	--	N/A
	Riverfront Lot 1	Residential	53	Avon	53	N/A
	Riverfront Village	Residential	59	Avon	--	N/A
	S. Frontage Rd Roundabout	Residential	21	Edwards	1.7	6. Ability to Serve Letter
	Stolport Restaurant	Commercial	TBD	Avon	--	2. Water Analysis
	District					
	3010 Basingdale (Phase II)	Residential	2	Vail	--	N/A
	841/851 Main St Minturn	Residential	4	Minturn	--	N/A
	Belden Place (1200 Block Main St)	Residential	41	Vail	N/A	N/A
	Highline (Double Tree Expansion)	Residential	43.65	Vail	0.79	6. Ability to Serve Letter
	North Minturn PUD	Residential	184	Minturn	--	N/A
	Red Sandstone Parking Garage	Infrastructure	N/A	Vail	--	N/A
	The Residences at Main Vail	Residential	72	Vail	0.81	6. Ability to Serve Letter
	S. Frontage Rd Roundabout	Infrastructure	N/A	Vail	--	N/A
	Vail Mountain View Phase II	Mixed Use	37	Vail	--	6. Ability to Serve Letter
	VVMC Phase II-East Wing	Commercial	--	Vail	--	N/A
	Vail Marriott Residence Inn	Mixed Use	75	Vail	--	N/A
Process	Construction Approval Process Steps:	0. Conceptual	1. Plan Review	2. Plan Approval	3. Acceptance	4. Warranty Period
	Development Approval Process Steps:	1. Connection Application	2. Water Demand Worksheet Analysis	3. Conditional Capacity to Serve Letter	4. Water Rights Allocation	5. Water Service Agreement



COMMITTEES

DISTRICT

AUDIT/BUDGET Dick Cleveland Steve Coyer	EMPLOYEE HOUSING Steve Coyer Dick Cleveland	RETIREMENT PLANS Bob Warner Linn Brooks David Norris
ORGANIZATIONAL DEVELOPMENT Bill Simmons Dick Cleveland	FACILITIES MASTER PLAN (FORMERLY REAL ESTATE AND NEW DEVELOPMENT) George Gregory Bob Warner	

AUTHORITY

AUDIT/BUDGET Geoff Dreyer George Gregory

JOINT

WATER QUALITY Sarah Smith Hymes (A) Timm Paxson (D)	RULES AND REGULATIONS Kim Bell Williams (A) Bob Warner (D)	WATER SUPPLY PLANNING Sarah Smith Hymes (A) Mick Woodworth (A) Kate Burchenal (D) Steve Coyer (D)
CLIMATE ACTION PLAN Sarah Smith Hymes (A) Kate Burchenal (D) Timm Paxson (D)	UNIFICATION *	UNIFICATION Geoff Dreyer (A) Sarah Smith Hymes (A) Steve Coyer (D) Bill Simmons (D)

(A) = Authority (D) = District

*unification will be discussed on board level, not subcommittee



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WATER AUTHORITY**

GOVERNED BY:

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Edwards

The Town of Avon

MEMORANDUM

TO: Board of Directors
FROM: Diane Johnson, Communications & Public Affairs Manager
DATE: Jan. 18, 2022
RE: Summary of Authority's Dec. 16, 2021, Board Meeting

The following is a summary of items discussed at the Dec. 16, 2021, Authority Board Meeting.

Board members present and acting were Chair George Gregory, Vice-Chair Sarah Smith Hymes, Secretary Kim Bell Williams, Treasurer Geoff Dreyer, Pam Elsner, and Mick Woodworth.

Resolution Designating Official Custodian of Records	The board approved a Resolution that designated David Norris as the Official Custodian of Records and adopted an updated policy on responding to open records requests.
Water Year 2021 Review and 2022 Outlook	Diane Johnson and Jason Cowles reviewed water year 2021, including annual reservoir storage and streamflows, and discussed the WY2022 outlook.
2022 Proposed Regular and Joint Meeting Schedule	The board agreed on a 2022 meeting schedule that continues with regular meetings on the fourth Thursday of each month at 8:30 a.m. and holds Joint regular meetings with the Eagle River Water & Sanitation District board of directors at 11 a.m. on the same days.
Avon Wastewater Nutrient Upgrade Project Update	Melissa Marts reported on the Nutrient Upgrade project that is ongoing at the Avon wastewater treatment facility. The project team is preparing for a major project milestone: bringing the new aeration basin volume, blowers, diffusers, instrumentation, and associated piping online in early January. The project is on schedule and within budget.
Water Main repairs	Niko Nemcanin reported on a difficult repair of a recent water main break that occurred near the Eagle River and West Beaver Creek Blvd. in Avon.
CORE Act	Diane Johnson informed directors that the CORE Act was recently removed from the National Defense Authorization Act, and that language negotiated years ago by District and Authority consultants, staff, and directors remains in the current version of the federal legislation.
Water Counsel Updates	Kristin Moseley said the Eagle Vail Augmentation Application seeks to adjudicate new water rights primarily associated with the golf course. She also informed the board that the Piney River Unit Diligence Application is currently being finalized.

UPPER EAGLE REGIONAL WATER AUTHORITY 2022 CONTRACT LOG

Contract	Date	Change Order			Contract	Project	Account	Statue and
Number	Executed	signed on	Project Name	Contractor	Amount	Manager	Number	Notes
22.15.002	12/29/21		Bolts Lake Phase 1 ESA Update	Pinyon Environmental, Inc.	\$5,000.00	J. Cowles	10.3.2.20.09.136 & 20.1.2.00.00.136	Open/Contract Expires 1/31/22
21.20.024	12/1/21		Hwy 6/W BC Blvd Emergency Water Main Repair	Nottingham Excavating & Trucking, Inc.	\$116,760.13	N. Nemcanin	20.1.9.00.35.500	Open/Contract Expires 12/31/21
22.20.001	01/04/22		High Zone Pump 4 Rebuild	Denver Industrial Pumps, Inc.	\$45,000.00	W. McCaulley	20.1.2.00.00.375	Open/Contract Expires 4/1/22
22.20.002	pending		RTU Phase Three	J.R. Filanc Construction Company, Inc.	\$1,309,646.00	C. Keller	20.1.2.00.00.469	Open/Contract Expires 12/31/22



**UPPER EAGLE REGIONAL
WATER AUTHORITY**

**Fiscal Year 2021
Quarterly Financial Report
For the 4th Quarter Ending December 31, 2021**

GOVERNED BY:

The Metropolitan
Districts of:
Arrowhead
Beaver Creek
Berry Creek
EagleVail
Edwards

The Town of Avon

-
1. Quarterly Financial Report Cover Memo
 2. Budget Comparison Report
 3. Controller's Notes
 4. Amended Budget Revenue Comparison Report
 5. Impact Fee Revenue Report
 6. Debt Service Revenue Report
 7. Service Revenue Report
 8. Tiered Water Revenue Report
 9. Revenue and Expense Trends Report
 10. Amended Budget Expenditure Report
 11. Balance Sheet and Income Statement Report
 12. Housing Report



GOVERNED BY:

The Metropolitan
Districts of:
Arrowhead
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Berry Creek
EagleVail
Edwards

The Town of Avon

To: Board of Directors
From: David Norris, Director of Finance
Date: January 27, 2021
Re: Quarterly Financial Reports

The quarterly reports attached represent our budget to actuals for the 4th quarter 2021 and are compared to the 4th quarter of the prior year, overall net position of our funding sources, analyses on revenue and expenditure trends, and a snapshot of our housing program net position. In general, revenues were higher than the 2020 4th quarter numbers, where operating expenses were \$373,390 higher and are expected, debt service and capital expenses were \$2,046,985 lower than 2020 4th quarter numbers.

Through the 4th quarter of fiscal year 2021, overall revenues represent a 50.21% decrease over the 4th quarter fiscal year 2020, primarily due to bonding. Total expenditures represent an 11.26% decrease over the 4th quarter of 2020, primarily due to capital spending increasing and debt service payments, which is expected. Overall spending is 67.77% of the total budget through the 4th quarter of the fiscal year. Impact fees are above the rate of collection from 2020, where in the 4th quarter of 2021 impact fees collected were \$740,822. These revenues are somewhat unpredictable but will be tracked and monitored closely.

The fund balance for the Authority water fund is healthy. However, to obtain higher credit ratings, impacting bond pricing, the Authority needs a fund balance policy, where the reserves should be set to utility industry standards of 1 year of Operating and Maintenance costs for the fund. The Operating agreement will see its final true up and as expected, the fund will see an estimated additional \$2.79M in expenses bringing the fund balance to an estimated \$3M.

Revenues are on track, coverage ratios are high, fund balance net position is trending upward, and there are not any major shifts from budgets at this point in the fiscal year.

Respectfully:

David Norris, Director of Finance, Eagle River Water and Sanitation District

Managed by Eagle River Water & Sanitation District

846 Forest Road Vail, Colorado 81657 Tel (970) 476-7480 erwsd.org

Budget Comparisons

Budget to actual comparisons are vital to assessing overall financial health and strategic priorities as an entity evolves. The following are overall budget comparisons and highlights through the 4th quarter 2021 compared to 4th quarter 2020.

- **Projected Total Fund Balance:**
 - Authority Fund - \$22,248,717/- \$11,673,746
 - This is primarily driven by bond revenues in 2020 and are expected.
- **Projected Ending, Unrestricted Fund Balance:**
 - Authority Fund - \$7,903,414/- \$7,513,578
 - The primary driving factors were unspent bond proceeds being restricted for future use, a stipulation of the bond covenants.
- **Targeted Fund Balance:**
 - Authority Fund - \$2,247,750 which represents 3 months operating expenses
- **Unrestricted, Uncommitted Fund Balance:**
 - Authority Fund - \$5,655,664
- **Coverage Ratios:**
 - Authority Fund – Debt service coverage target rate: 3.14/+565.84%
 - Primarily driven from 2021 focus on fund balance and increased revenues.
 - Minimum Target ratio: 1.10 times/7.08/+370.43%

**Upper Eagle Regional Water
Budget Comparison**

For the Twelve Months Ending Friday, December 31, 2021

	Year to Date			2020	
	Original Budget	Revised Forecast	Actual	(Over)/Under Budget	Actual
WATER SERVICE REVENUE	\$12,977,256	\$12,977,256	\$13,410,371	\$433,115	\$12,487,293
ROUTINE EXPENDITURES					
Water Treatment	\$1,870,992	\$1,860,992	\$1,727,488	\$133,504	\$1,620,457
Water Distribution	\$312,500	\$312,500	\$320,097	-\$7,597	\$338,704
Nonrecurring Replacements/Repairs	\$935,000	\$935,000	\$813,809	\$121,191	\$419,046
General & Administrative	\$4,787,500	\$4,787,500	\$4,573,088	\$214,412	\$6,293,650
Water Rights Protection & Studies	\$250,000	\$250,000	\$215,832	\$34,168	\$332,522
Water Quality	\$95,000	\$95,000	\$73,572	\$21,428	\$66,678
Total Routine Expenditures	\$8,250,992	\$8,240,992	\$7,723,886	\$517,106	\$9,071,057
FUNDS GENERATED FROM SALES	\$4,726,264	\$4,736,264	\$5,686,485	\$950,221	\$3,416,236
DEVELOPER & OTHER REVENUE					
Plant Investment & WSI Fees	\$220,752	\$220,752	\$740,822	\$520,070	\$668,439
Capital Replacement SFE Base	\$811,847	\$811,847	\$816,173	\$4,326	\$786,487
Bond Proceeds Revenue					\$46,512,550
Contributed Capital Cash			\$45,784	\$45,784	\$3,499,055
Interest & Miscellaneous Income	\$189,085	\$189,085	\$54,662	(\$134,403)	\$406,922
Total Other Funding	\$1,221,664	\$1,221,664	\$1,657,441	\$435,777	\$51,873,453
FUNDS GENERATED FOR DEBT & CAPITAL	\$5,947,928	\$5,957,928	\$7,343,926	\$1,385,998	\$8,777,140
DEBT SERVICE & CAPITAL EXPENDITURES					
Debt Service Expense	\$2,618,552	\$2,618,552	\$2,596,441	\$22,111	\$16,561,714
Bond Issue Expense					\$485,580
Capital Construction & Capital Replacement Plan	\$25,563,644	\$28,595,477	\$16,421,231	\$12,174,245	\$4,017,364
Total Debt Service & Capital Expenditures	\$28,182,196	\$31,214,029	\$19,017,673	\$12,196,356	\$21,064,658
Net Debt Service & Capital Expenditures	(\$28,182,196)	(\$31,214,029)	(\$19,017,673)	\$12,196,356	\$25,447,892
SURPLUS/(DEFICIT)	(\$22,234,268)	(\$25,256,101)	(\$11,673,746)	\$13,582,354	\$34,225,031
Beginning Fund Balance	\$33,922,463	\$33,922,463	\$33,922,463		\$7,353,082
Ending Fund Balance	\$11,688,195	\$8,666,362	\$22,248,717		\$41,578,113
RESTRICTED FUNDS					
3 Month Operating Reserve	\$2,247,750	\$2,247,750	\$2,247,750		\$2,247,750
Bonds Rate Stabilization Fund	\$600,000	\$600,000	\$600,000		\$600,000
Debt Service Payable	\$1,021,096	\$1,021,096	\$1,277,744		\$864,530
Unspent Bond Proceeds	\$22,448,842	\$22,448,842	\$10,219,809		\$22,448,842
Total Restricted Funds	\$26,317,688	\$26,317,688	\$14,345,303		\$26,161,122
Unrestricted Fund Balance	(\$14,629,493)	(\$17,651,326)	\$7,903,414		\$15,416,991
Targeted Unrestricted Fund Balance	\$2,247,750	\$2,247,750	\$2,247,750		\$2,109,941
Unrestricted Fund Balance Above/(Below) Target	(\$16,877,243)	(\$19,899,076)	\$5,655,664		\$13,307,050
Coverage Ratios:					
Target Met (1.00 is minimum goal)	(6.51)	(7.85)	3.52		7.31
Debt Service Coverage (excluding nonrecurring repair/replacements - 1.00 is minimum target)	2.63	2.63	3.14		0.56
Debt Service Coverage with Rate Stabilization Fund (1.10 is minimum target)	11.20	11.21	7.08		1.91

Saved to I: Drive

Controller's Report

For the 4th Quarter Ending December 31, 2021

Budget Transfers:

The budget transfer for capital is largely the Bolt's Lake project request of \$2.56 million. The remaining budget transfers are due to capital rollovers from 2020 totaling \$372,145.

Variances & Forecasts:

Water service revenue as of December 31, 2021, is +3.3% budgeted amounts in the tiered water sales accounts. Overall routine expenditures are -6% budgeted amounts year to date.

Other funding is +36% budgeted. Water System Impact Fees collected have already exceeded the original annual budget by \$520,000. We have also received \$45,784 cash in lieu of water rights. Interest income is well below the original budget.

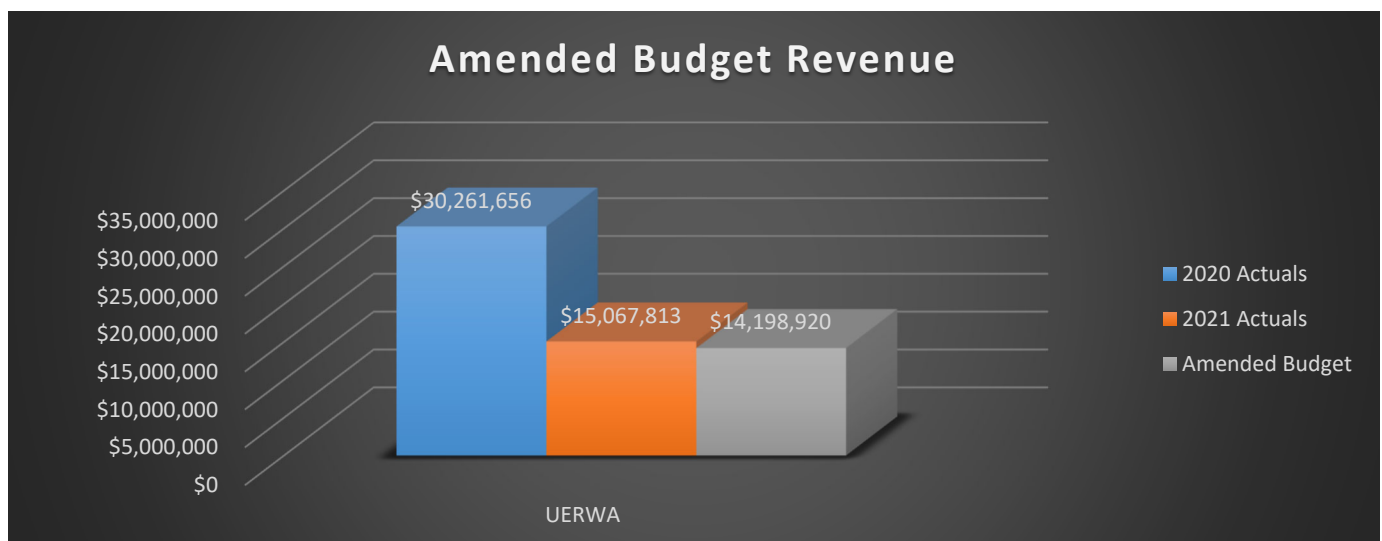
Capital spending is slower than anticipated. Bolt's Lake project makes up about \$5.8 million of unspent bond funds. Because of timing, it is possible some of the 2021 capital budget will need to be rolled into 2022 to complete the budgeted projects.

Amended Budget Revenue Comparison

The Authority adopted the Fiscal Year 2021 budget on November 17, 2020. The total annual revenue budget is \$14,198,920. The following are overall revenue budget comparisons and highlights through the 4th quarter 2021 compared to 4th quarter 2020.

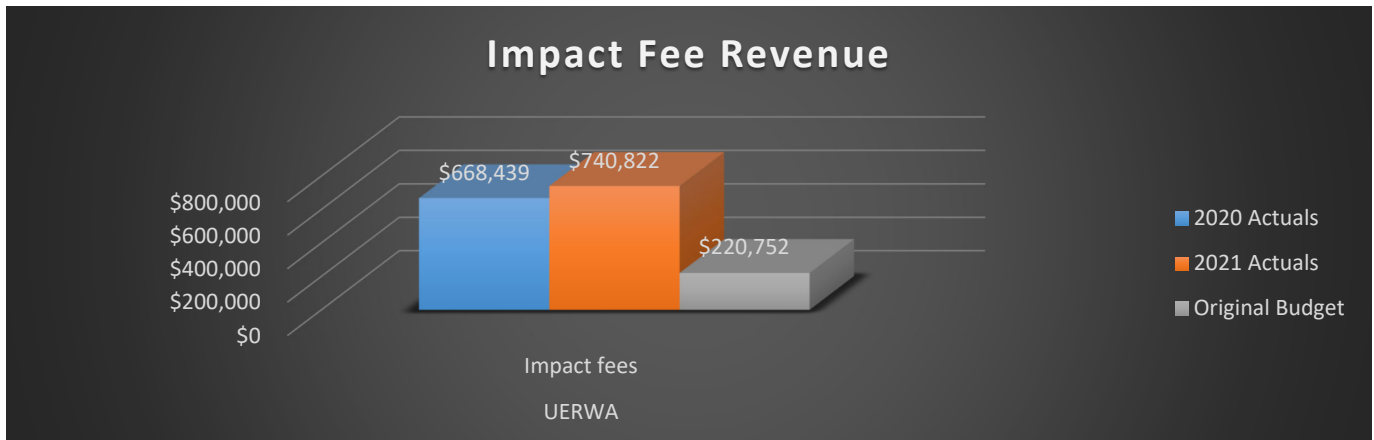
○ **Revenue Totals:**

- Authority Fund - \$15,067,813 /-50.21%
- Primary driving factors were due to bonds, debt service, CRP base fees, and tiered water sales increases.

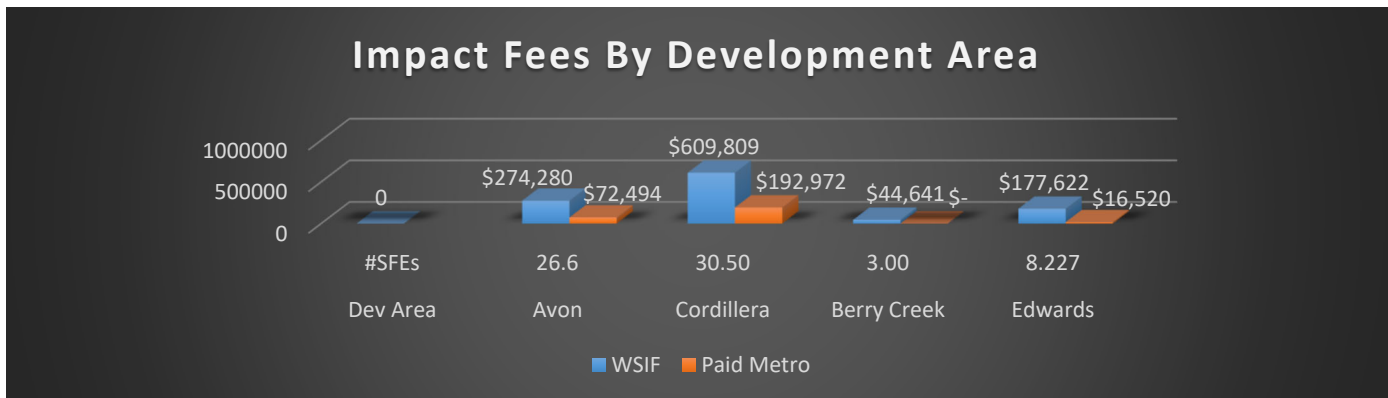


Impact Fee Revenue Comparative Summary

- **Impact Fee Revenue Totals:**
 - Authority Fund - \$740,822/+\$72,383
 - Primary driving factors are construction projects and their timing. The revenues are unreliable by nature but are monitored closely.

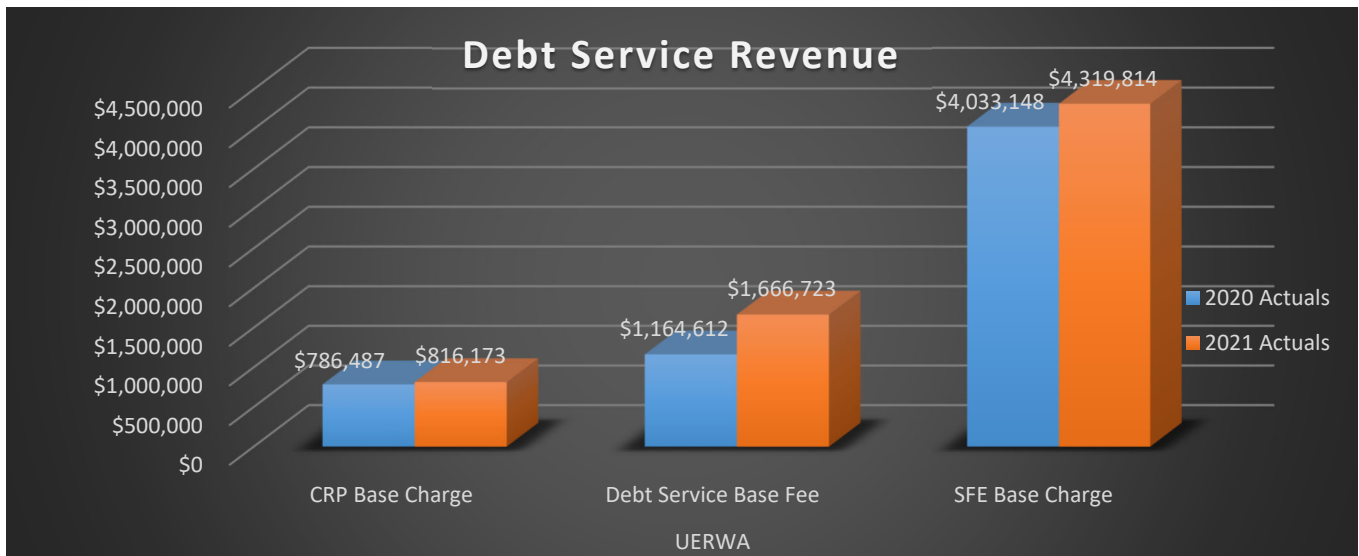


Impact fees collected by development area represent our primary geographical service areas and collection pools by major funding source.



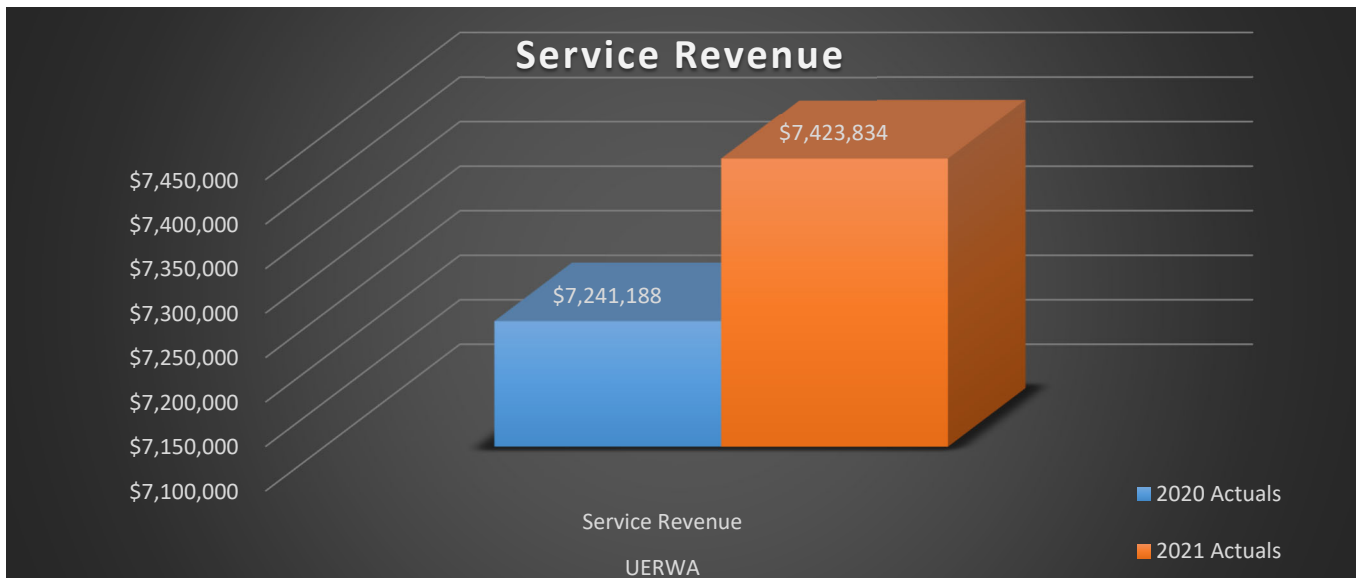
Debt Service Revenue Summary

- **Debt Service Revenue Totals:**
 - Authority Fund - \$6,802,710/+\$818,464/+13.68%
 - The primary driving factor of the increase in revenue is debt service base rate increases and SFE base rate increases.



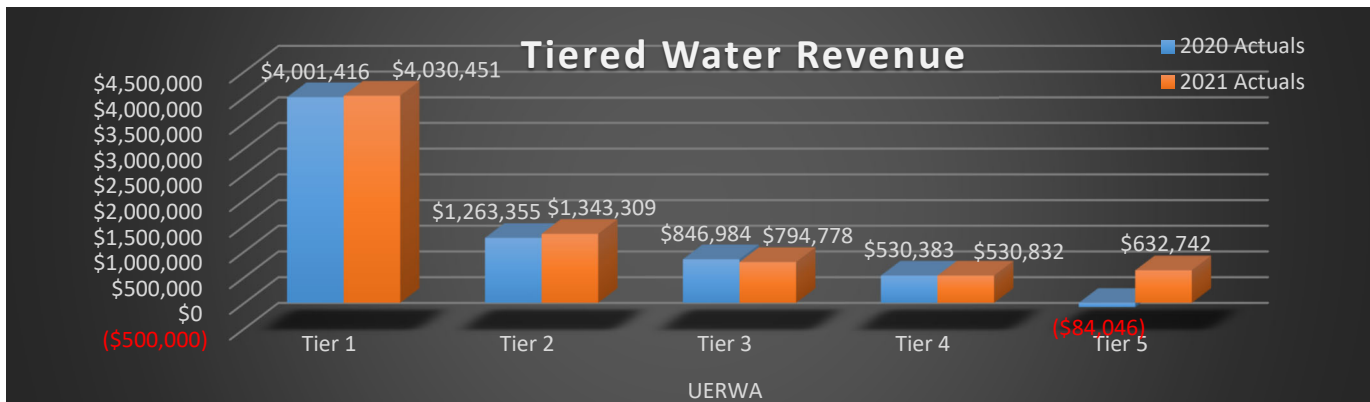
Service Revenue Summary

- **Service Revenue Totals:**
 - Authority Fund - \$7,423,834/+\$182,646/+2.52%
 - The primary driving factor of the increased revenues was use sales and service increases.



Tiered Water Revenue Summary

- **Tiered Water Sales Revenue Totals:**
 - Authority Fund - \$7,332,111/+\$774,020/+11.80%

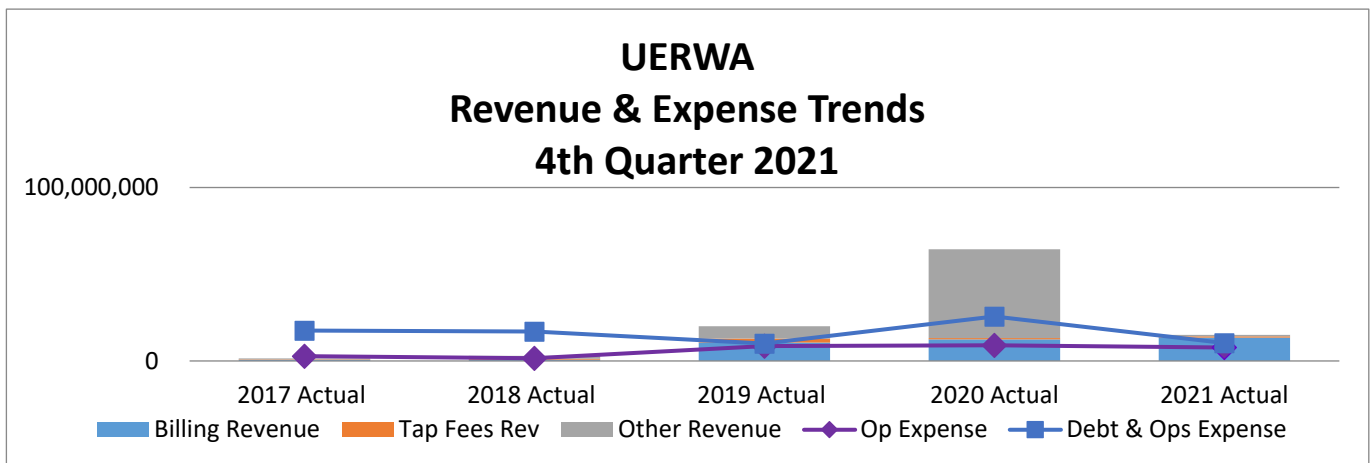


Revenue & Expense Trends

Revenue to expense trends are important to analyze as this is a key component of operating net income and a component of a financial health index. Looking solely at operating expenditures, debt expenditures, and operating expenditures comparatively to revenues, through the 4th quarter 2021:

- **Net Income/(Loss):**

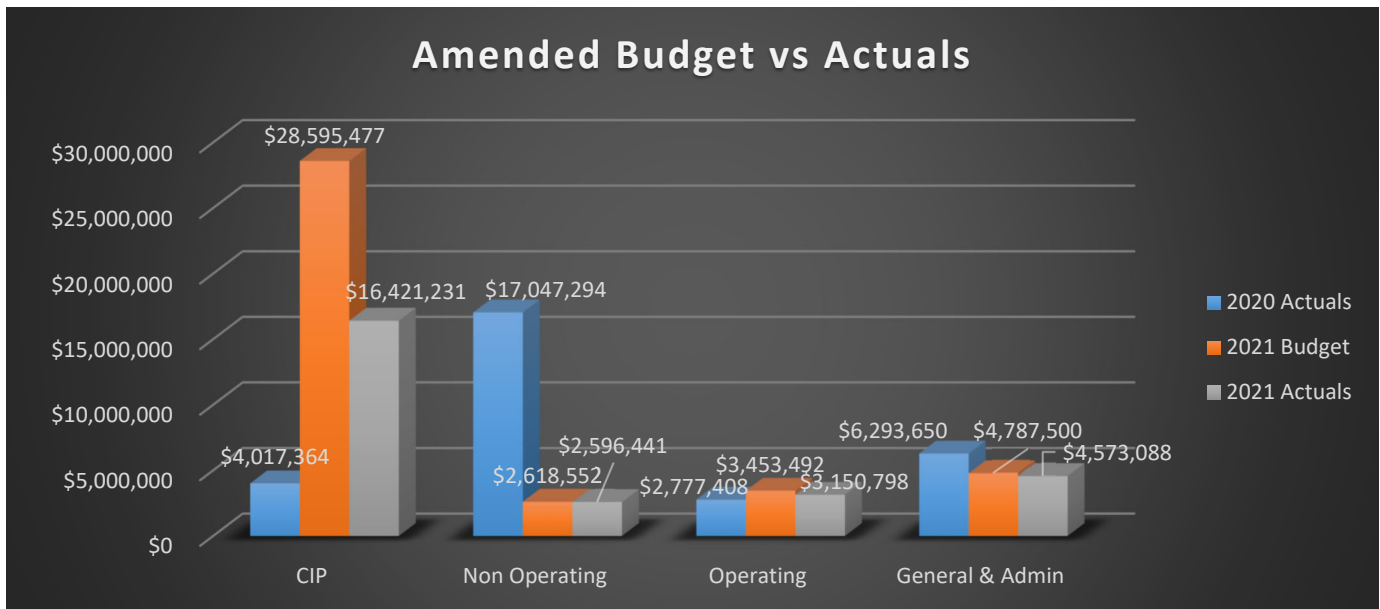
- Authority Fund - \$7,343,926/-86.72% and \$4,747,485/-87.74% when including debt expenditures.
 - The decreases are primarily driven from decreased impact fee collections and an increase in operating and debt service expenses in 2021.



Amended Budget Expenditure Comparison

- **Amended Budget Vs Actuals:**

- Authority Fund - Total expenditures - \$26,741,559/- \$3,394,156
- The primary driving factor for the difference from expenditure comparisons was derived from capital projects shifting to fiscal year 2021 and will shift to 2022.



Balance Sheet & Income Statement Report

Balance Sheets are snapshots of the District's Assets, Liabilities and Equity Accounts at a point in time, whereas the Income Statement displays a current picture of revenues and expenses and overall profitability. In reviewing Balance Sheets & Income Statements, it is important to assess these to ascertain an overall valuation, ratio analysis and incremental changes in certain accounts from period to period.

- **Total Assets/Liabilities/Net Income:**
 - Total Assets - \$128,360,822/+\$2,176,503
 - Total Liabilities- \$59,977,931/- \$2,897,416
 - Total Net Income - \$5,133,689
- **Ratio Analysis:**
 - ROA – 4.03%/-1.74%
 - ROE – 8.24%/+3.98%
 - DE Ratio – .947/- .078
 - Working Capital – \$22,235,304/- \$11,352,957
 - Current Ratio – 18.11/+11.99

UPPER EAGLE REGIONAL WATER

For the Twelve Months Ending Friday, December 31, 2021

	2018 Actual	2019 Actual	2020 Actual	2021 Actual
Assets:				
Current Assets:				
Cash and Investments	\$7,785,397	\$6,779,303	\$35,535,481	\$21,742,219
Receivables, Net of Allowance for Uncollectables:				
Accounts Receivable	2,640,828	2,967,323	2,114,940	1,651,758
Interest Receivable	26,110	26,110		
Current Portion of Notes Receivable	6,988	7,369	7,771	
Prepaid Expenses	127,021	900	127,070	140,912
Total Current Assets	10,586,344	9,781,005	37,785,262	23,534,889
Non-Current Assets:				
Other Assets:				
Patronage Dividend Receivable	380,712	400,633	384,040	389,685
Notes Receivable	82,776	75,407	67,636	67,636
Investment in Eagle Park Reservoir Company	4,944,602	4,944,602	8,398,473	8,398,473
Total Other Assets	5,408,090	5,420,642	8,850,149	8,855,794
Capital Assets:				
Land & Improvements				
Water/Storage Rights	2,490,110	2,490,110	2,490,110	2,490,110
Construction in Progress	4,138,871	8,497,210	12,514,574	28,935,805
Treatment Plants	38,365,515	41,234,573	41,991,272	41,991,272
Distribution System	89,327,194	90,911,165	93,516,580	93,516,580
Water Wells	15,191,417	15,267,165	15,267,165	15,267,165
Less: Accumulated Depreciation	(75,874,244)	(81,028,768)	(86,230,793)	(86,230,793)
Total Capital Assets	73,638,863	77,371,455	79,548,908	95,970,139
Total Non-Current Assets	79,046,953	82,792,097	88,399,057	104,825,933
Total Assets	89,633,297	92,573,102	126,184,319	128,360,822
Deferred Outflows of Resources:				
Deferred Charge on Refunding	13,874	13,874		
Total Deferred Outflows of Resources	13,874	13,874		
Total Assets & Deferred Outflows of Resources	89,647,171	92,586,976	126,184,319	128,360,822
Liabilities:				
Current Liabilities:				
Accounts Payable	2,942,678	2,277,613	3,642,743	1,030,429
Interest Payable	138,375	133,421	212,930	186,929
Loans & Bonds Payable	1,139,215	1,144,077	334,204	75,000
Deposits	10,745	7,244	7,124	7,227
Total Current Liabilities	4,231,013	3,562,355	4,197,001	1,299,585
Non-Current Liabilities:				
Other Payables	11,105	68,052	19,706	19,706
Loans & Bonds Payable	28,805,660	27,648,414	58,658,640	58,658,640
Total Non-Current Liabilities	28,816,765	27,716,466	58,678,346	58,678,346
Total Liabilities	33,047,778	31,278,821	62,875,347	59,977,931
Net Position:				
Retained Earnings	56,150,167	56,599,394	61,308,156	63,305,072
Profit (Loss)	464,613	4,708,763	2,510,553	5,133,689
Total Net Position	56,614,780	61,308,157	63,818,709	68,438,761
Operating Revenues:				
Water Service Fees	11,660,639	11,300,594	13,273,780	14,226,544
Total Operating Revenues	11,660,639	11,300,594	13,273,780	14,226,544

UPPER EAGLE REGIONAL WATER

For the Twelve Months Ending Friday, December 31, 2021

	2018 Actual	2019 Actual	2020 Actual	2021 Actual
Operating Expenses:				
WATER TREATMENT				
Management Contract				
Depreciation	2,044,037	2,157,352	2,188,912	
Utilities	532,472	542,337	581,301	560,141
Chemicals and Supplies	335,049	398,035	407,610	398,215
Total Water Treatment Expenses	2,911,558	3,097,724	3,177,823	958,356
WATER DISTRIBUTION EXPENSES				
Management Contract				
Depreciation	2,864,224	2,997,172	3,013,113	
Utilities	290,736	329,171	338,704	320,097
Repairs and Maintenance	317,807	272,598	254,561	477,393
Total Water Distribution Expenses	3,472,767	3,598,941	3,606,378	797,490
OTHER OPERATING EXPENSES				
Utilities	13,538	9,552	8,884	14,028
Chemical and Supplies				
Repairs and Maintenance	1,010,244	762,844	575,079	842,424
Outside Services	59,807	98,842	56,341	25,844
Eagle Park Reservoir Operating Expenses	124,267	73,846	134,156	176,385
Facility Security				
Regulatory Compliance	10,967	9,674	10,191	10,869
Total Other Operating Expenses	1,218,923	954,758	784,651	1,069,350
GENERAL & ADMIN. EXPENSES	5,342,930	6,079,833	6,653,478	4,838,920
Total General & Admin. Exp.	5,342,930	6,079,833	6,653,478	4,838,920
Total Operating Expenses	12,946,178	13,731,256	14,222,330	7,664,116
Operating Income (Loss)	(1,285,539)	(2,430,662)	(948,550)	6,562,428
Non-Operating Revenues (Expenses):				
Investment Income	228,589	218,910	43,024	8,354
Interest Credit - Build America Bonds	293,272	294,369	253,044	
Other Non-Operating Revenues	25,201	27,207	29,312	34,688
Settlement Proceeds	35,702	5,026,504	5,556	3,850
Interest Expense	1,545,717	1,486,235	1,037,704	2,261,247
Paying Agent Fees	2,669	1,569	1,623	990
Total Nonoperating Revenues (Expenses)	(965,622)	4,079,186	(708,391)	(2,215,345)
Income (Loss) Before Capital Contributions	(319,917)	(6,509,848)	(240,159)	8,777,773
Capital Contributions:				
Plant Investment Fees	1,216,759	2,300,552	668,439	740,822
Water Storage Fees, Net of Refunds	498,685	192,392	3,499,055	45,784
Contributed Assets	1,000,330	567,295		
Total Capital Contributions	2,715,774	3,060,239	4,167,494	786,606
Change in Net Position	464,613	4,708,763	2,510,553	5,133,689

Housing Comparison Summary

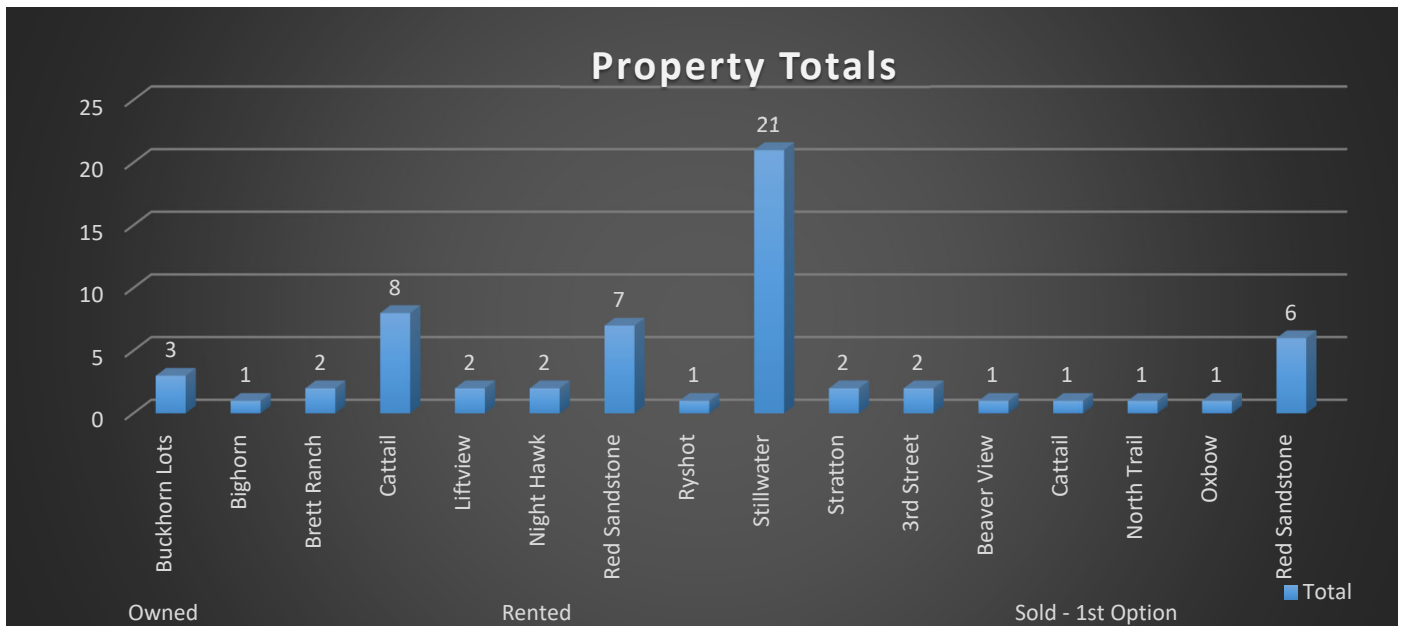
- **Total Assets/Liabilities/Net Position:**
 - Total Assets - \$18,708,223
 - Total Liabilities -\$52,362
 - Total Net Position – \$105,934
 - Net position positive for the first time in 4 years.

○ **Net Income:**

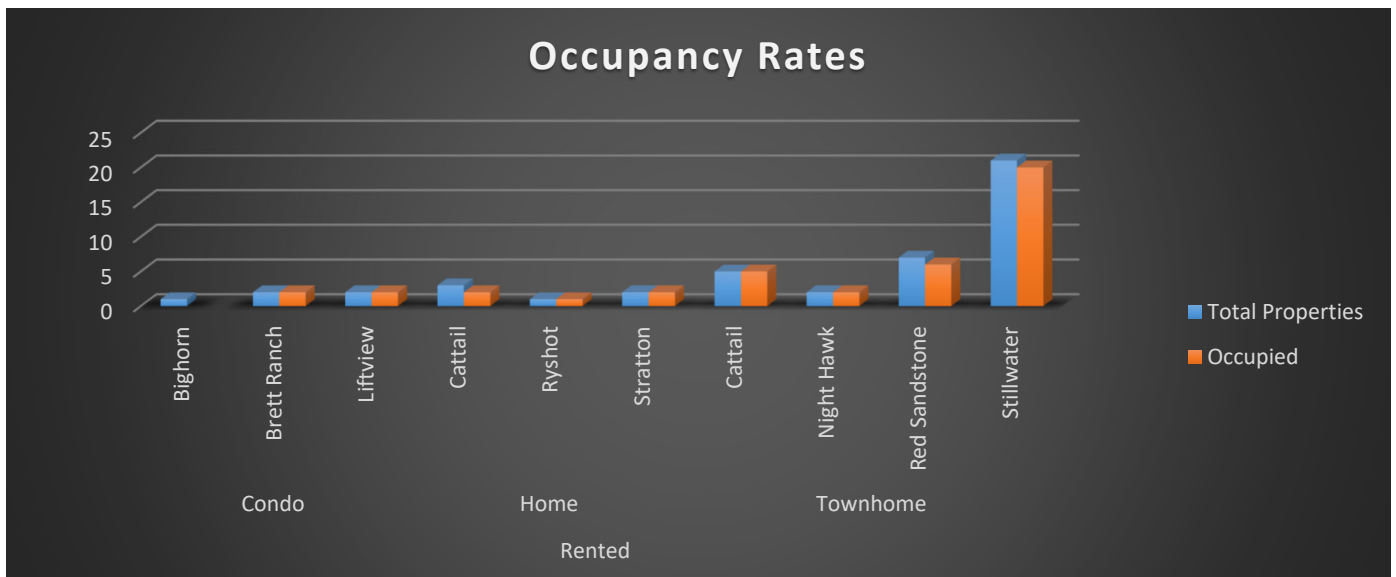
- In assessing net income for a program such as this, it is important to investigate all the program expenses. Operationally and non-operational expenses are included in this program.
 - Total operating net income - \$298,923/+\$50,530

Housing Summary											
EAGLE RIVER WATER AND SANITATION											
For the Twelve Months Ending Friday, December 31, 2021											
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
Assets:											
Current Assets:											
Cash and Investments (Security Deposits)					1,000	5,300	12,100	13,100	26,300	\$20,700	\$19,200
Deposits								574,271	120,153	120,153	0
Total Current Assets					1,000	5,300	12,100	587,371	146,453	140,853	19,200
Non-Current Assets:											
Other Assets											
Notes Receivable		386,255	386,255	402,038	427,305	343,985	443,985	416,495	366,495	226,735	126,735
Total Other Assets		386,255	386,255	402,038	427,305	343,985	443,985	416,495	366,495	226,735	126,735
Capital Assets:											
Construction in Progress	275,653	275,653	275,653	275,653	376,536	418,399	1,051,293	8,927,854	286,704	287,095	788,608
Employee Housing	5,353,858	7,781,035	7,806,255	7,773,833	7,324,074	7,379,471	7,431,996	6,077,813	19,476,796	20,007,410	20,007,585
Less: Accumulated Depreciation	(673,123)	(803,471)	(998,311)	(1,091,018)	(1,207,706)	(1,363,093)	(1,554,136)	(1,337,925)	(1,888,512)	(2,233,905)	(2,233,905)
Total Capital Assets	4,956,388	7,253,217	7,083,597	6,958,468	6,492,904	6,434,777	6,929,153	13,667,742	18,074,988	18,060,600	18,562,288
Total Non-Current Assets	4,956,388	7,639,472	7,469,852	7,360,506	6,920,209	6,778,762	7,373,138	14,084,237	18,441,483	18,287,335	18,689,023
Total Assets	4,956,388	7,639,472	7,469,852	7,360,506	6,921,209	6,784,062	7,385,238	14,671,608	18,587,936	18,428,188	18,708,223
Liabilities:											
Current Liabilities:											
Deposits	22,274	26,454	26,264	29,340	27,540	30,560	33,315	30,635	30,785	32,787	52,362
Total Current Liabilities	22,274	26,454	26,264	29,340	27,540	30,560	33,315	30,635	30,785	32,787	52,362
Total Liabilities	22,274	26,454	26,264	29,340	27,540	30,560	33,315	30,635	30,785	32,787	52,362
Net Position:											
Retained Earnings	822,165	1,146,659	1,313,193	1,471,534	1,147,868	1,354,034	1,336,607	(11,375)	(196,570)	(192,999)	105,934
Total Net Position											
TOTAL LIABILITIES AND EQUITY	844,439	1,173,113	1,339,457	1,500,874	1,175,408	1,384,594	1,369,922	19,260	(165,785)	(160,202)	158,296
Revenues:											
Operating Revenues:											
Rental Income	305,311	318,443	284,878	271,364	291,903	300,885	417,752	439,532	474,952	498,906	637,285
Total Operating Revenues	305,311	318,443	284,878	271,364	291,903	300,885	417,752	439,532	474,952	498,906	637,285
Non-Operating Revenues:											
Investment Income				2,548	11,050			66,389	496	11,210	10,391
Other		130,297		10,542	(444,739)	66,378	(13,142)	(1,156,050)	87		
Total Non-Operating Revenues		130,297		13,090	(433,689)	66,378	(13,142)	(1,089,670)	583	11,210	10,391
Total Revenues	305,311	448,740	284,878	284,454	(141,786)	367,263	404,610	(650,138)	475,535	510,116	647,676
Expenses:											
Operating Expenses											
Dues & Utilities	70,606	70,805	72,814	76,470	76,300	95,189	77,978	81,772	97,201	157,564	105,296
Property Management									5,600	22,060	12,474
Maintenance	23,240	52,810	43,030	45,542	103,080	63,408	81,009	132,526	76,542	80,678	226,993
Other		631		1,500						1,421	3,990
Total Operating Expenses	93,846	124,246	115,844	123,512	179,380	158,597	158,987	214,298	179,343	261,723	348,753
Non-Operating Expenses:											
EHOP			2,500	2,601	2,500	2,500	1,500	1,500	1,500	1,500	1,500
Stipend							80,445	246,365	274,458	240,163	248,100
Master Leases							181,105	235,681	205,429	3,149	
Total Non-Operating Expenses			2,500	2,601	2,500	2,500	263,050	483,546	481,387	244,812	249,600
Total Expenses	93,846	124,246	118,344	126,113	181,880	161,097	422,037	697,844	660,730	506,535	598,353
Total Operating Net Income (Loss)	211,465	324,494	169,034	160,942	(321,166)	208,666	245,623	(864,436)	296,192	248,393	298,923
Total Program Net Income (Loss)	211,465	324,494	166,534	158,341	(323,686)	206,166	(17,427)	(1,347,982)	(185,195)	3,581	49,323

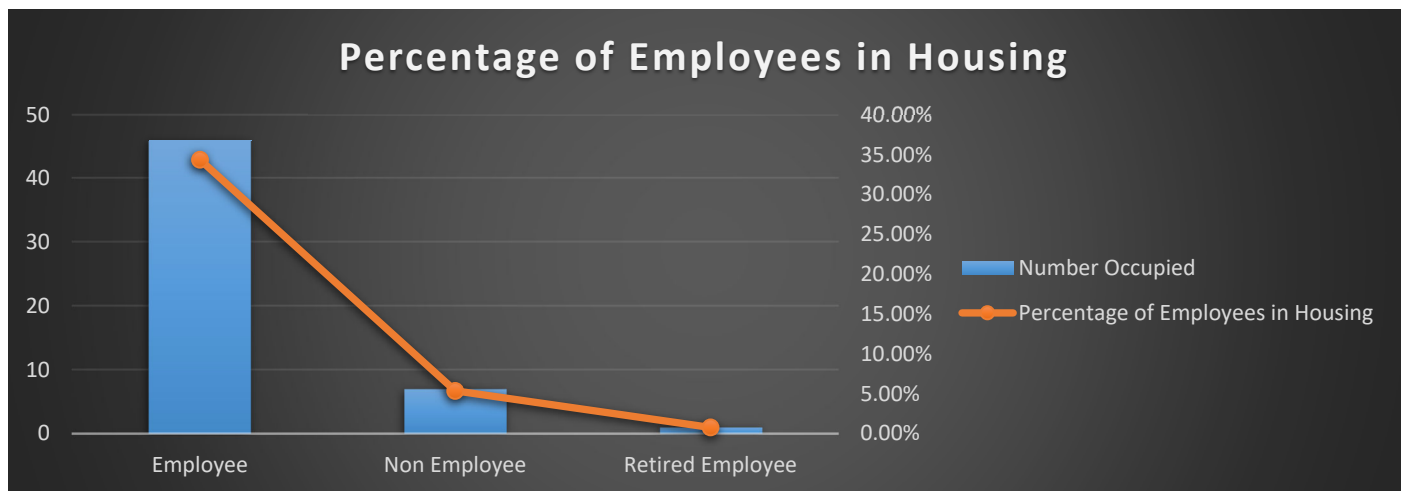
The District owns a total of 61 properties, which includes a variety of single-family homes, condos, and vacant lots. Stillwater is our primary concentration of property. Of the total 61 properties, 46 are rented and 12 have been sold where the District has the first right of refusal in a future sale.



Of the total 46 rented properties, 42 are occupied as of December 31, 2021.



In assessing our Housing Program's value to our employees an analysis of total employees in District properties is warranted. As of December 31, 2021, the District housed 40.46% of the total employee base in District owned properties.



To accurately assess our housing properties and their ability to generate net income, the below chart shows the net income by location. One property finishes the 4th quarter with a slight net loss situation.

Location	Expense	Revenue	Net Income
Big Horn	\$8,576.54	(\$16,288.00)	(\$7,711.46)
Buckhorn Lots	\$1,378.08		\$1,378.08
Cattail	\$31,815.62	(\$91,495.92)	(\$59,680.30)
Crazy Horse	\$13,423.61	(\$53,893.66)	(\$40,470.05)
Liftview	\$8,376.53	(\$16,664.00)	(\$8,287.47)
Nighthawk	\$21,765.47	(\$23,766.00)	(\$2,000.53)
Red Sandstone	\$59,980.96	(\$79,957.79)	(\$19,976.83)
Ryshot	\$9,819.64	(\$19,735.00)	(\$9,915.36)
Stillwater	\$158,211.31	(\$323,111.04)	(\$164,899.73)
Stratton Flats	\$17,389.04	(\$21,511.00)	(\$4,121.96)
Net Income	\$330,736.80	(\$646,422.41)	(\$315,685.61)



OPERATIONS MONTHLY REPORT January 2022

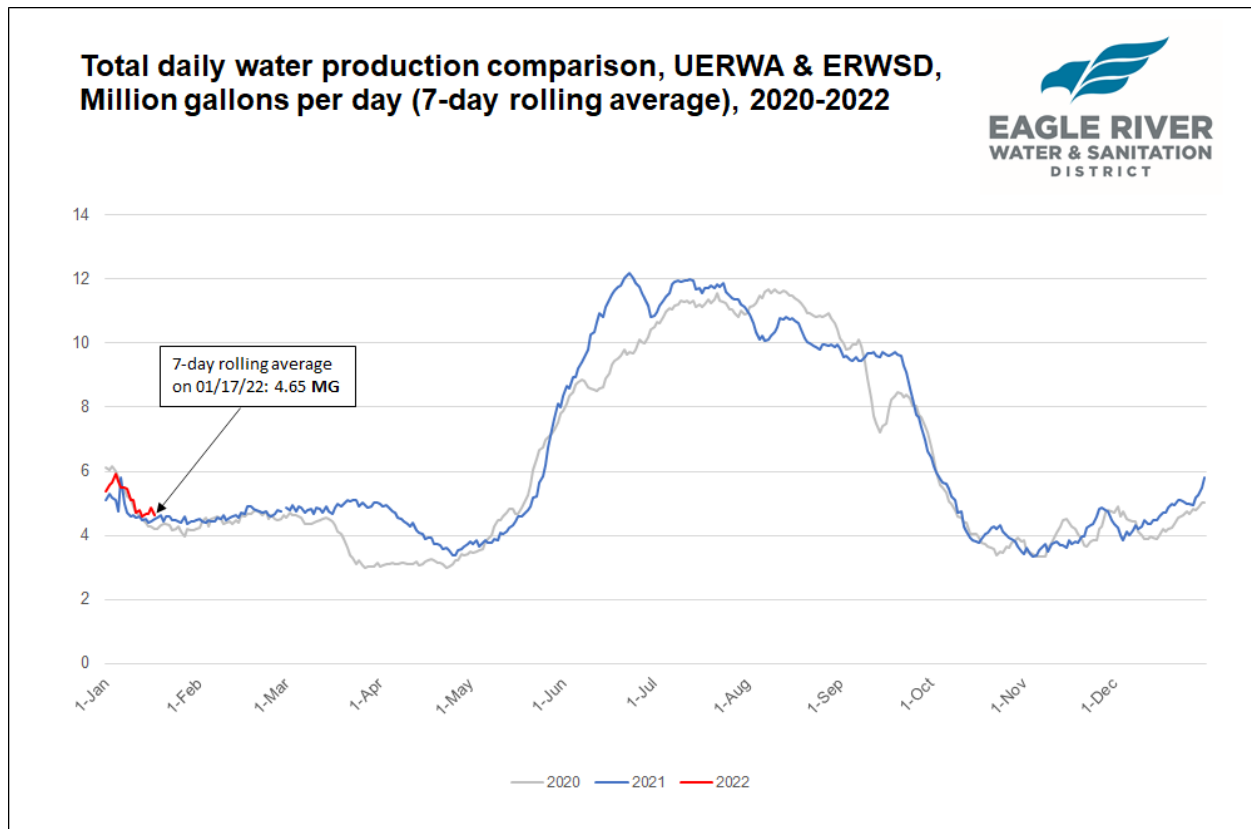
LOCAL NEWS

No updates.

WATER

Brad Zachman

The system-wide water production comparison was updated through Jan. 17. System production is normal for this time of the year.



The 2021 annual regulatory compliance sampling and reporting has been completed for all water programs.

Water operations staff has started preparations for the District's Colorado Department of Public Health and Environment (CDPHE) Sanitary Survey. The Sanitary Survey is expected to occur in late-summer 2022.

Clean Water. Quality Life.™

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Responses to the District's Request for Qualifications (RFQ) for the Water Production and Treatment Facilities Masterplan project are due Jan 20. The overarching goal of this project is to develop a system-wide master improvement plan for the District's and Authority's treatment and production facilities. The primary deliverable of the project will be a detailed year-by-year infrastructure capital improvement schedule that will be used for future capital planning and budgeting.

The final dose adjustment to the orthophosphate chemical feeds were made across the system in December. The feed systems are now off. The orthophosphate feeds were discontinued based on the findings of the optimal corrosion control treatment (OCCT) study, which indicated that the addition of orthophosphate at previous doses provided negligible lead and copper corrosion control benefits. The Authority's and District's CDPHE Monitoring Plans have been updated to reflect the discontinuation of the orthophosphate chemical feeds.

Vail groundwater wells R4 and R6 are currently out of service for motor replacements. Water operations staff is coordinating the repair work, which will require pulling the pumps and motors with a large crane truck.

Water Operations staff members continue to support a variety of Capital Improvements Projects (CIPs) including disinfection, filling, and testing the new Traer Water Storage Tank and commissioning of the newly reconstructed Fenno (Cordillera) groundwater treatment facility.

Seasonal water releases are occurring at Eagle Park Reservoir and Black Lakes.

LABORATORY & WATER QUALITY

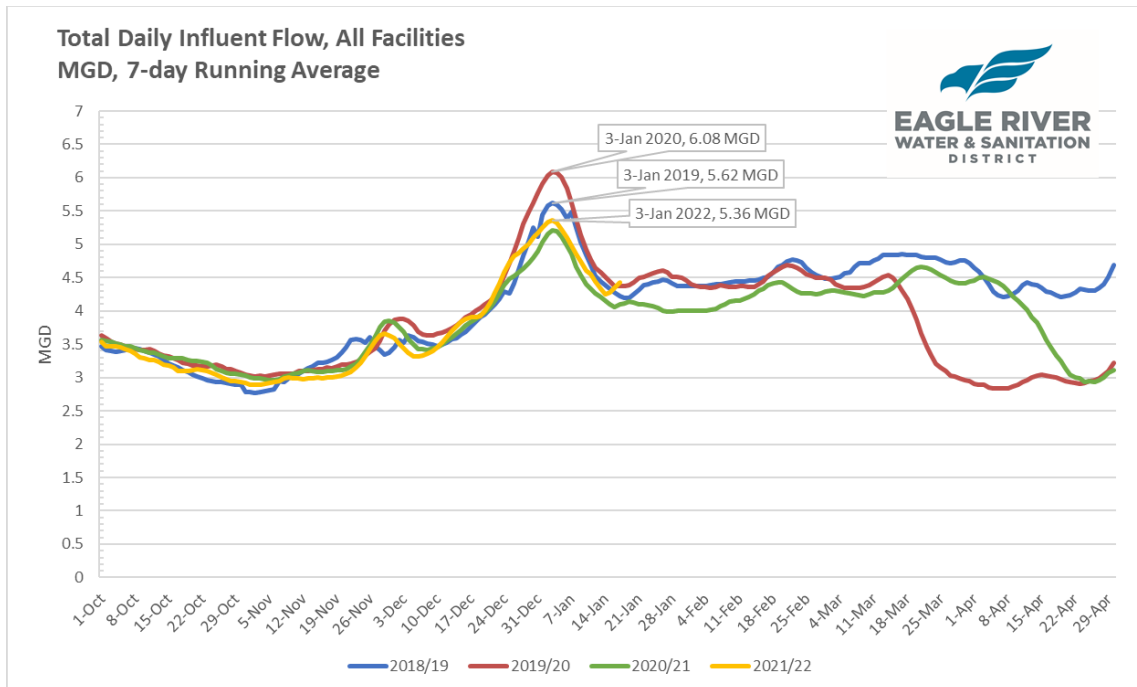
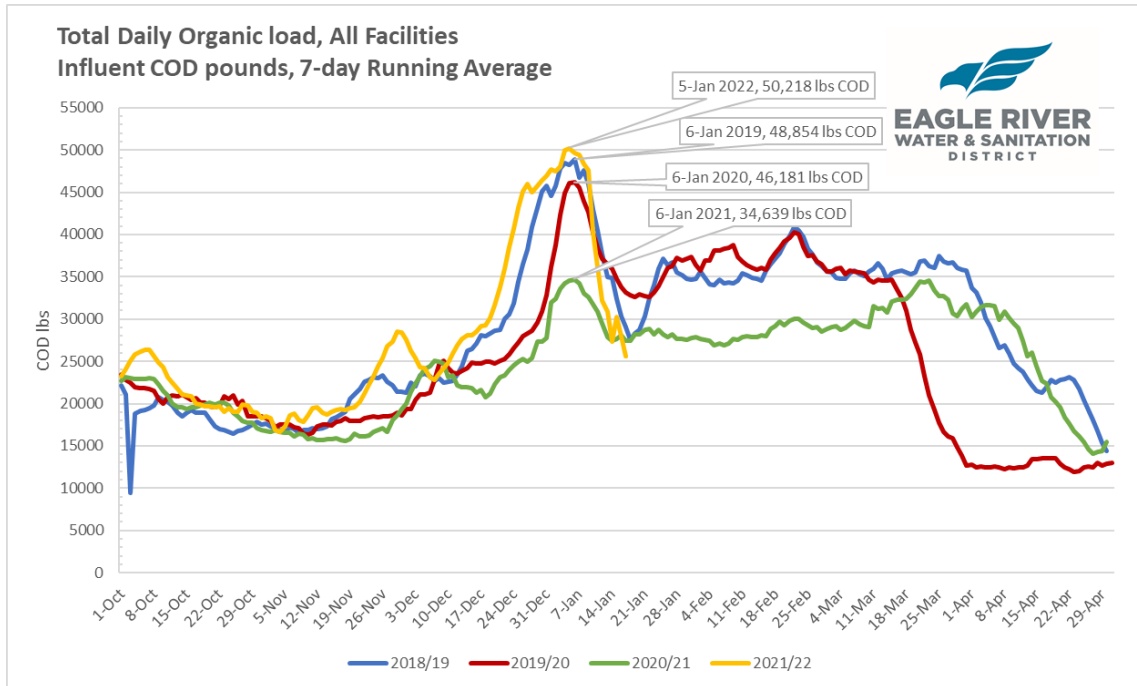
Leah Cribari & Siri Roman

2020 Macroinvertebrate scores are available for Gore Creek, Black Gore Creek, Red Sandstone, and Eagle River. A separate memo detailing the results are in the Board packet.

WASTEWATER

Rob Ringle

The holiday season typically represents the peak of organic loading for all three wastewater (WW) facilities. The 2021-22 peak seven-day average load (cumulative across the facilities) of 50,200 pounds Carbonaceous Oxygen Demand (COD) exceeded the respective peaks of recent past seasons, including the 48,800 pound COD peak observed in the 2018-19 season. Total influent flow increased in proportion to past years but did not significantly exceed those respective past values.

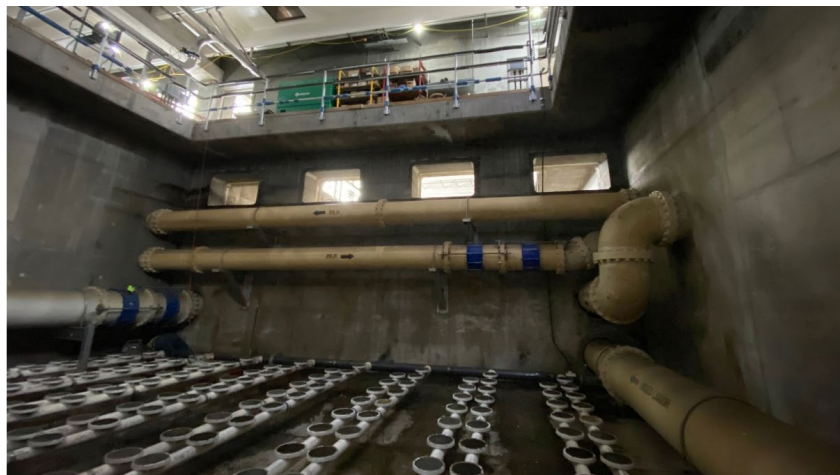


Staff have worked hard to adapt to the rapidly changing flows and loading and have also tackled several urgent equipment repair projects. Waste pump rebuilds were completed at both Vail WW and Avon WW. Edwards WW staff tackled a major overhaul of one of the centrifuge units that is used for dewatering biosolids.



Rotating components of the Edwards WW west centrifuge unit were removed, and bearings were replaced.

Avon WW staff are preparing for conversion to the Aeration Basin 2 secondary process, as planned for Jan. 19. This represents a major milestone of the Nutrient Upgrade Project and the start of operation with the new Anaerobic-Anoxic-Aerobic (A2O) biological treatment process. Process flow paths will be altered to remove the existing Aeration Basin 1 train from service. Staff have contributed significant effort in planning and preparation for this conversion. Major improvements will begin in the existing volume area of this basin following dewatering.



Avon WW aeration basin #2 sub-basin F, prepared for service.

WW department leadership drafted and submitted several reports to CDPHE in December to fulfill requirements of respective WW facility permits. For Vail WW, a progress report was submitted documenting efforts towards attaining compliance with future effluent temperature limits. Such limits are presently planned to take effect in 2026 and will affect the months of October and November. For Avon WW, a progress report was submitted to document achievement of Nutrient

Upgrade Project milestones and other efforts towards attainment of Regulation 85 effluent limitations for nutrients, as required in 2024. Respective to all three facilities, a plan was submitted to document efforts in reduction of inflow and infiltration (I/I) and indicate plans for further reductions over the next four years. This is a blanket requirement that has appeared in many recently renewed municipal wastewater permits across the state. These reports have not been included in the board packet in interest of brevity, but they can be provided upon request.

FIELD OPERATIONS

Niko Nemcanin

With almost 2,000 hydrants in the system, the Field Operations crew is busy removing snow to ensure that hydrants are accessible. Each year, staff reaches out to local fire departments and the community requesting help with this effort.

During winter months, the team is focused on evaluating equipment and inventory needs, training and developing staff, evaluating the 2021 season maintenance metrics, and commercial driving license training.

UTILITY SERVICES

Shane Swartwout

A Backflow Prevention and Cross Connection Control (BPCCC) update is included in a separate memo.

ENGINEERING

Jeff Schneider

WATER PROJECTS

Radio Telemetry Unit (RTU) System Upgrades

Carter Keller

General Project Scope: This project is a systematic approach to install standardized communication equipment to increase the reliability of the telemetry system throughout the distribution system (82 sites) and develop a standard (i.e., non-proprietary) telemetry platform to allow competitive pricing for upgrades, replacement, and system maintenance. Implementation is anticipated over a three-year period with a highly detailed sequence and schedule to limit distribution system disruptions.

Project Update: Authority Phase 2 commissioning has been completed on schedule, and Phase 2 final closeout is underway. Phase 3 contracts have been approved for the 2022 work and the contracting process is in its final stages. Submittals, procuring equipment, and building the RTU panels will continue through Q1 with Factory Acceptance Testing (FAT) to follow.

Traer Creek Water Storage Tank

Mark Mantua

General Project Scope: This project consists of the replacement of the Traer Creek Water Storage Tank. In addition to the tank replacement, the scope includes piping, appurtenances, and selective replacement of identified equipment including the RTUs and control cabinets.

Project Update: DN Tanks and their subcontractors have completed yard piping, overflow piping, hatches, and vent installation. Pressure testing of yard piping was completed to District standards on Jan. 10. Electrical improvements and telemetry installation are underway. Concrete issues on the dome roof have been identified and the contractor, engineer, and District staff are working collaboratively on a solution, which will be implemented once temperatures allow for overnight curing of patching materials. We anticipate filling the tank for hydrostatic testing on Jan. 24. Once the tank is hydrostatically tested, dome roof repair and telemetry improvements will be completed before the tank is operational. This project is under budget and on track to be substantially complete in early spring 2022.

Avon Drinking Water Facility (ADWF) PLC Upgrades

Jenna Beairsto

General Project Scope: This project includes replacement of two of the programmable logic controllers (PLCs) at ADWF. Additionally, a new server room will be constructed within the facility. All programming and PLC logic will be reverse engineered to determine required updates and improvements associated with the modification and replacement of the existing PLCs.

Project Update: Stantec was selected to design and assist with solicitation and bid review for a hard bid project delivery. Stantec provided the 99% design documents to the project team including the control philosophies for all systems at the plant. Stantec's head designer spent a day onsite at ADWF with staff to get a better understanding of plant operations. Per the project schedule, bidding is expected in early 2022.

Edwards Spur Road Phase 2 Water Main

Mark Mantua

General Project Scope: The Edwards Spur Road Phase 2 consists of two projects. The first is installation of 1,700 linear feet of water main that was installed in conjunction with the CDOT Edwards Spur Road project. The second is installation of a water main that will run parallel and under the railroad tracks to connect the Edwards Drinking Water Facility to the water main that was previously installed during the 2019 Spur Road project and to a main near Miller Ranch Road. The project will alleviate hydraulic issues in the Edwards low pressure zone.

Project Update: The project is in winter shutdown and an update will be provided once work resumes.

Fenno Wellhouse and Raw Water Conveyance

Jeffrey Schneider

General Project Scope: The project consists of complete replacement of a small treatment facility in Cordillera that treats water from seven groundwater wells and pumps into the distribution system. The previous facility did not meet electrical code, had some safety concerns, and was

generally at the end of its useful life. Improvements to the wells and raw water piping are also included in this project.

Project Update: Electrical equipment delays have pushed the project schedule into late February/early March. The variable frequency drives (VFDs) are being configured and are scheduled for delivery and installation to the site on Jan. 31. We recently received word that supply chain issues have pushed the delivery of the main distribution panel (MDP) components to early March. The contractor is working on workarounds to perform system testing prior to MDP arrival. Electrical installation and coatings are underway, along with small punchlist work by the general contractor. System startup will likely be pushed to March 2022.

The project also includes work at each of the seven groundwater wells feeding the wellhouse. Staff has prepared correspondence and easement documentation for accessing the wells for inspection and design and intend to begin coordination with Cordillera Metro District and affected nearby homeowners.

Water Production and Treatment Masterplan

Jenna Beairsto

General Project Scope: This project was first approved in the capital budget in 2018 but has been deferred due to staffing and competing priorities. The masterplan will be a wholistic look at all production and treatment facilities system-wide including treatment plants and wells. The goal is to do a thorough risk-based analysis and provide a roadmap for future capital project implementation in light of threats from climate change, low stream flows, wildfires, etc. along with a detailed condition assessment of existing assets.

Project Update: The request for qualifications (RFQ) was issued on Dec. 16. The team has issued three addenda as part of the RFQ process. Statements of Qualification (SOQ) from firms are due back on Jan. 20. An internal team will review and grade the proposals and set up a shortlist of firms for interviews beginning the week of Feb. 7. Firm selection is anticipated by Feb. 24.

WASTEWATER PROJECTS

Avon Wastewater Treatment Facility (AWWTF) Nutrient Upgrades

Melissa Marts

General Project Scope: The Avon WWTF requires upgrades to meet Regulation 85, which requires a reduction of the concentrations of nitrogen and phosphorus in the effluent. The scope of this project includes the following: addition of 0.6 million gallons of aeration basin capacity; a new secondary clarifier; structural modifications to the existing aeration basins to remove the existing double-tees and replace with a building structure; a new odor control study and system; and other improvements throughout the facility. This project also includes improvements identified in a 2017 condition assessment in other process areas throughout the facility.

Project Update: The project team is working toward the largest start-up of the project on Jan. 19. The modified Aeration Basin 2 will be placed into service and commissioned along with three new blowers, diffuser system, mixers and sump pumps. After commissioning on Aeration Basin 2, work

to remove the soil and double tees from Aeration Basin 1 will begin. Work continues to progress on the new secondary clarifier and site utilities. The project on schedule for completion before January 2023.

Dowd Junction Collection System Improvements

Jenna Beairsto

General Project Scope: The project consists of four major components, all of which are at the end of their useful lives: the aerial interceptor crossing at Dowd Junction; Lift Station 4, which conveys all of Minturn's wastewater; the aerial interceptor crossing at the Minturn Road bridge; and the force main downstream of Lift Station 4. The project will also include capacity for growth in its respective service areas, most notably the Minturn area improvements.

Project Update: *West Vail Interceptor Aerial Crossing:* Ductile iron pipe was delivered as is being stored at the Contractor's storage yard offsite. The first segment of the bridge has been fabricated and the second segment is currently being fabricated at Wheeler's facility. Remaining materials are scheduled to be delivered in March 2022, at which time the contractor will return to the site to complete the project. We are renegotiating the contract completion dates based on global supply chain issues beyond control of the contractor.

Lift Station Replacement: HDR will submit the Issued for Bid (IFB) set of drawings to the District the week of Jan. 17. The Team met with HDR to discuss the control scheme for the new lift station. The Lift Station Design Package will be combined with the Force Main and ECO Trails designs for a combined project. The project will be put out to bid in mid-February.

Force Main Design: Murraysmith has submitted the 95% review set of contract documents. District staff continue discussions with Eagle County ECO Trails to partner for the trail and force main construction through the US 6/24 corridor. Coordination is ongoing for the lift station and force main tie-in details.

Avon Lab Improvements

Melissa Marts

General Project Scope: A new Inductively Coupled Plasma Mass Spectrometer (ICP-MS) purchased by the District will be installed in the lab. This will provide improved analytical capability to our internal and external customers. This device enables District staff to perform in-house metals analyses that are normally outsourced. Lab and architectural modifications will be constructed, including a new gas cabinet, duct chase, and fume hood. During design, the makeup air unit (MAU) serving the lab was identified to be at the end of its useful life; the HVAC system for the lab and lab offices will also be replaced.

Project Update: No bids were received for this project after a well-attended mandatory pre-bid meeting. After consultation with our legal team, a proposal for this work has been requested from Moltz Construction. Moltz is finalizing their proposal for the work but has already requested submittals for the HVAC equipment to help with the long lead time of this equipment. Contingent upon successful negotiation, work is anticipated to be underway in the summer of 2022.

Vail Wastewater Treatment Facility (VWWTF) Master Plan Improvements

Melissa Marts

General Project Scope: A condition assessment of the Vail WWTF conducted as part of the 2017 Master Plan identified various upgrades required to keep the facility in reliable and operable condition. The scope includes a new, larger diesel generator and associated electrical, structural repairs in the aeration basin, equalization, and clarifier rooms, replacement of the aging ultraviolet (UV) system, and construction and installation of an external facility bypass.

Project Update: Black and Veatch is underway with developing the 30% design deliverables which will be used to solicit a construction manager at risk (CMAR) contractor. The project team is currently developing CMAR solicitation documents which are expected to be issued Jan. 28. Due to the long lead time of equipment, construction is anticipated in fall 2022 and continuing throughout 2023.

GENERAL CAPITAL

Vail Office Remodel

Jenna Beairsto

General Project Scope: The project will provide a safe and secure singular entry point for facility visitors by reconfiguring the vestibule entrance. The scope also includes reconfiguring and reorganizing of the Vail Administration Office. Most of the construction will be concentrated on the south half of the first floor; however, reorganization will occur building wide. In addition to the front entrance, the project will provide improved ADA access to the building. Several departments will shift within the lower level to allow for additional office and meeting space. The project includes cubicle and office furniture purchase and replacement for some of the improved areas.

Project Update: Demolition is underway for the project. Departments have been temporary relocated out of the work zone. Furniture was donated, sold, and otherwise diverted from the landfill as much as possible. Remaining items are being removed from the facility in preparation for General Contractor mobilization and demolition the week of Jan. 17. Parking at the Vail Facility will be updated to allow for contractor staging and access. The Contractor has submitted long lead time items to the architect and engineer for review.

WATER RESOURCES

Len Wright

The latest Drought Monitor shows Colorado entirely out of category “D4-Exceptional Drought”, as shown below in Figure 1. Eagle County has significantly improved in recent months, with western Eagle County in “D0-Abnormally Dry” and Southern and Eastern portions of Eagle County in “D1-Moderate Drought”, as shown below in Figure 2.

Figure 1. Colorado Drought Monitor, Jan. 11, 2022.

(<https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?CO>).

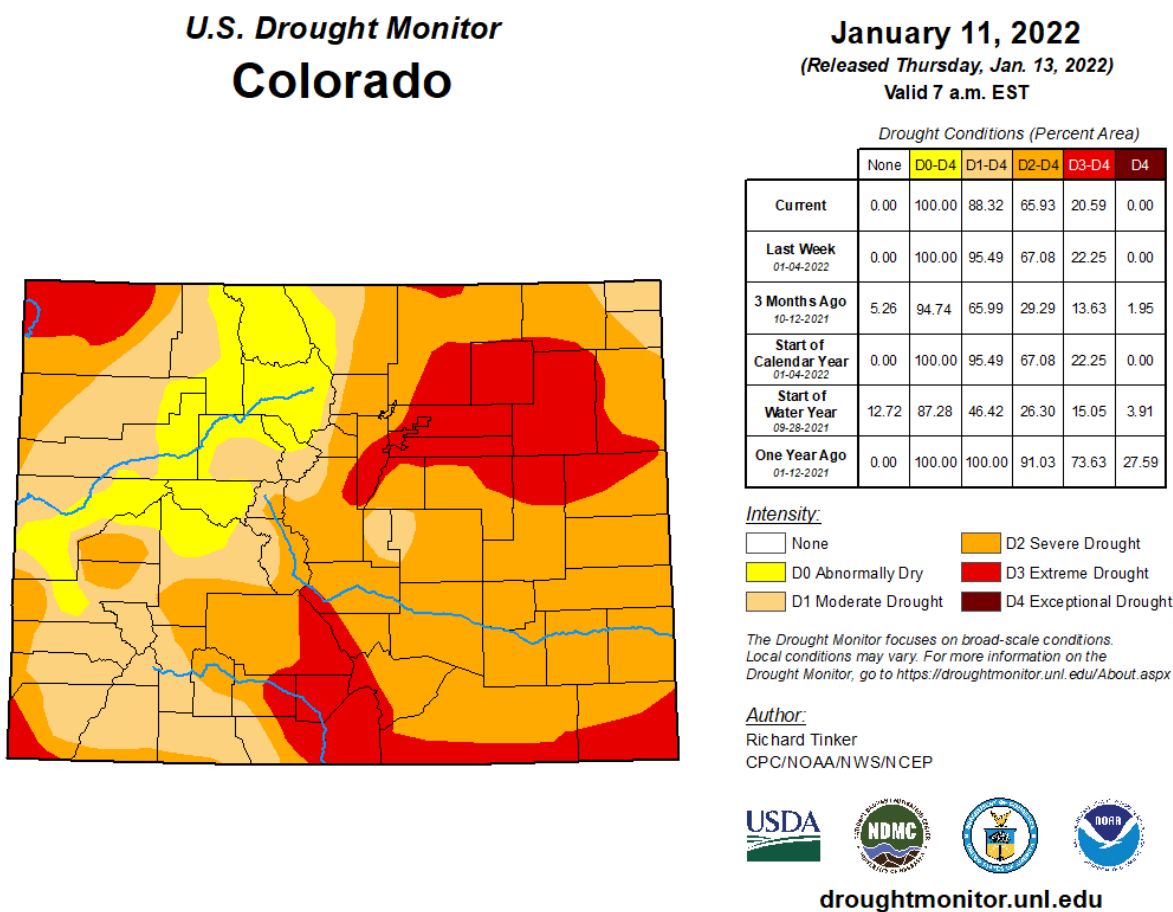
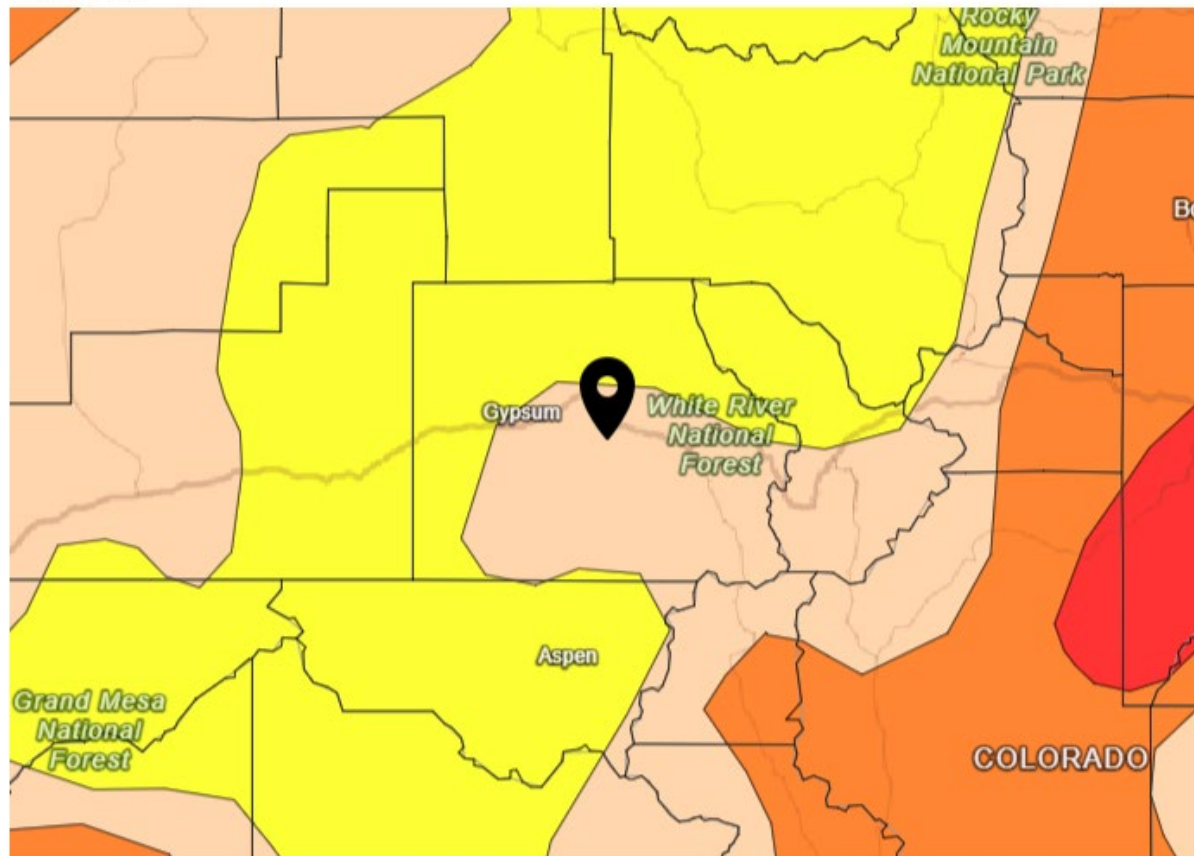


Figure 2. Eagle County Drought Monitor, Jan. 11, 2022 (NOAA, NIIDIS).

Current Conditions for Eagle County: U.S. Drought Monitor



U.S. Drought Monitor for Eagle County

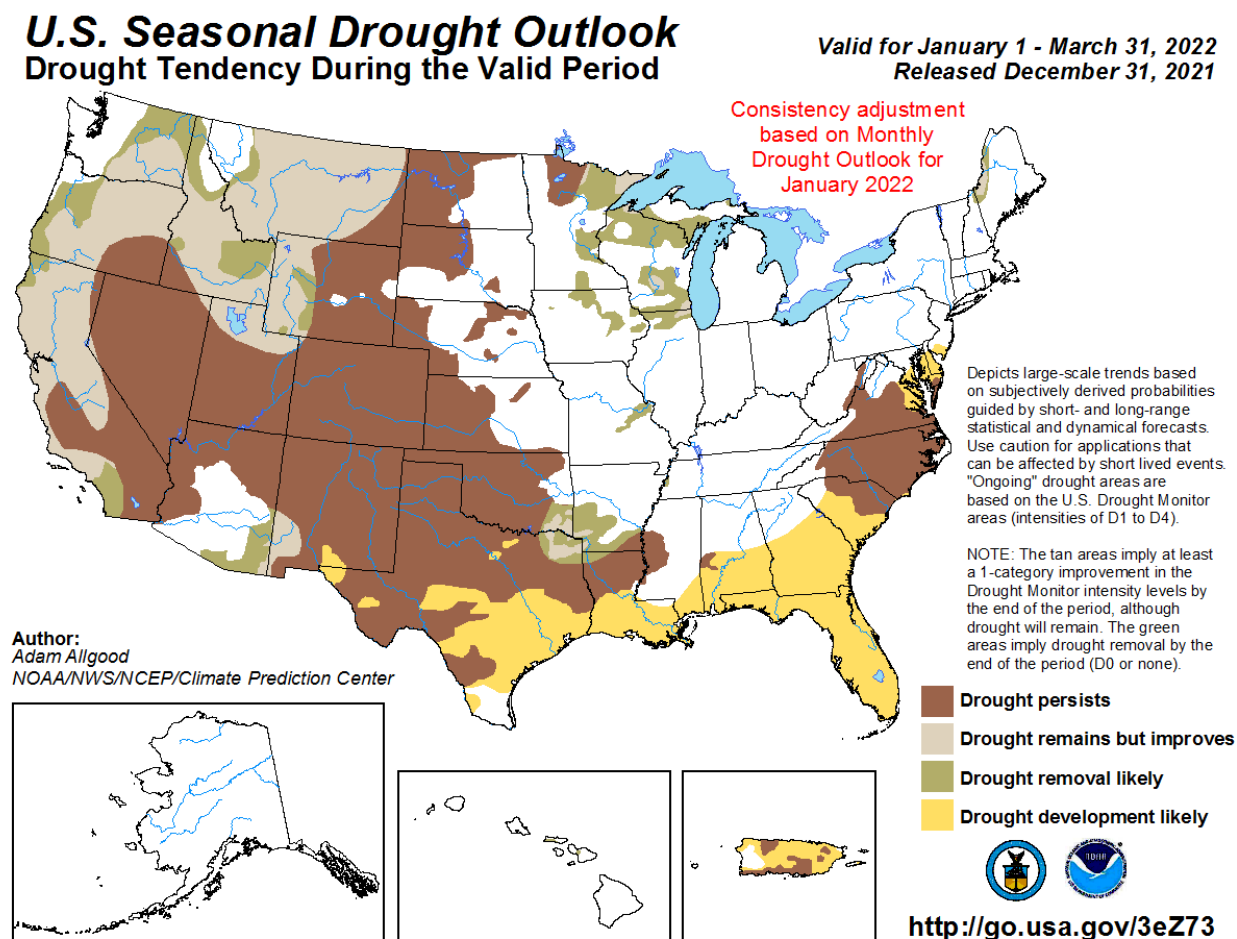


Source(s): NDMC, NOAA, USDA
Updates Weekly - 01/11/22

Drought.gov

The seasonal drought outlook is not expected to change for Colorado through March 2022. This is largely because the La Niña conditions show a likelihood of average precipitation and temperature for the remainder of the winter.

Figure 3. US Seasonal Drought Outlook through March 31, 2022 (NOAA).



Snowpack is hovering near average for all local Eagle River SNOTEL sites as well as Copper Mountain. The four Eagle River Basin SNOTEL sites are shown in Figure 4, at 103% of the 1991-2020 median value for Jan. 18, 2022. Total cumulative precipitation for Water Year 2022 is shown in Figure 5 for the same four stations, at 105% of the 1991-2020 median. The five individual local SNOTEL stations are shown in Figures 6-10, showing a range of 85% of normal at Beaver Creek to 113% of normal at Fremont Pass.

Figure 4. Eagle River Basin SNOTEL stations, Jan. 18, 2022 (Beaver Creek, McCoy Park, Fremont Pass, Vail Mountain).

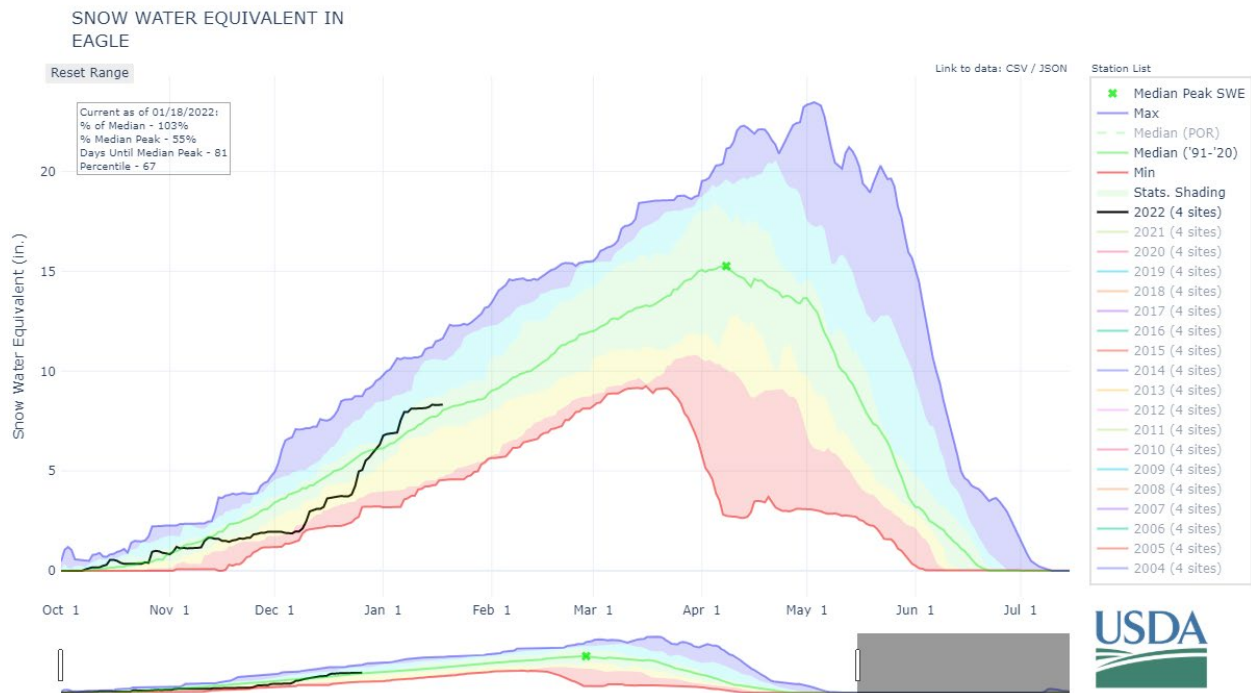


Figure 5. Cumulative precipitation for the Eagle River Basin, Water Year 2022 (NOAA/CBRFC).

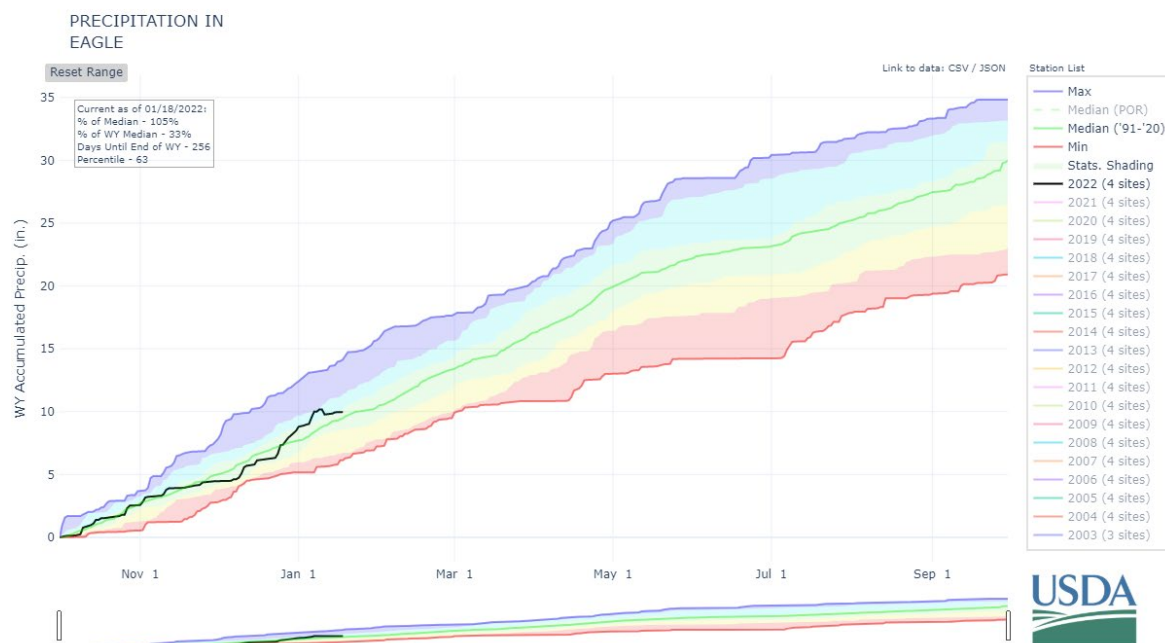


Figure 6. Snow Water Equivalent, Beaver Creek Village SNOTEL, Jan. 18, 2022 (USDA).

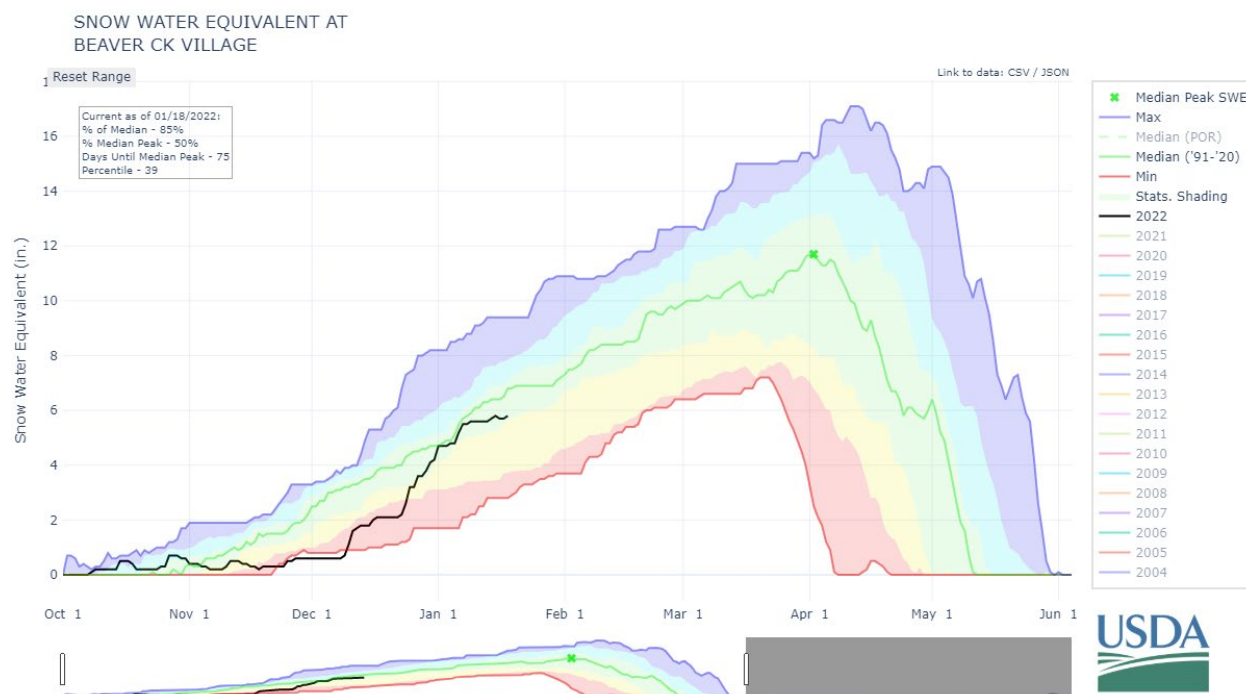


Figure 7. Snow Water Equivalent, McCoy Park SNOTEL, Jan. 18, 2022 (USDA).

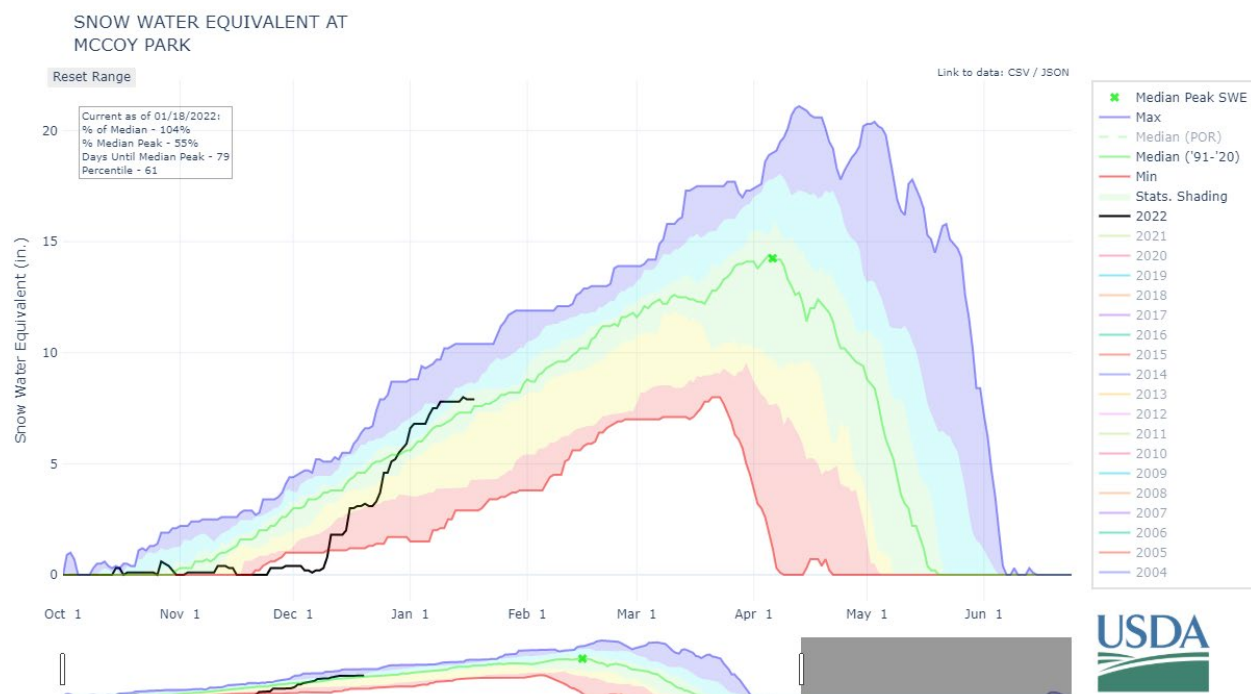


Figure 8. Snow Water Equivalent, Fremont Pass SNOTEL, Jan. 18, 2022 (USDA).

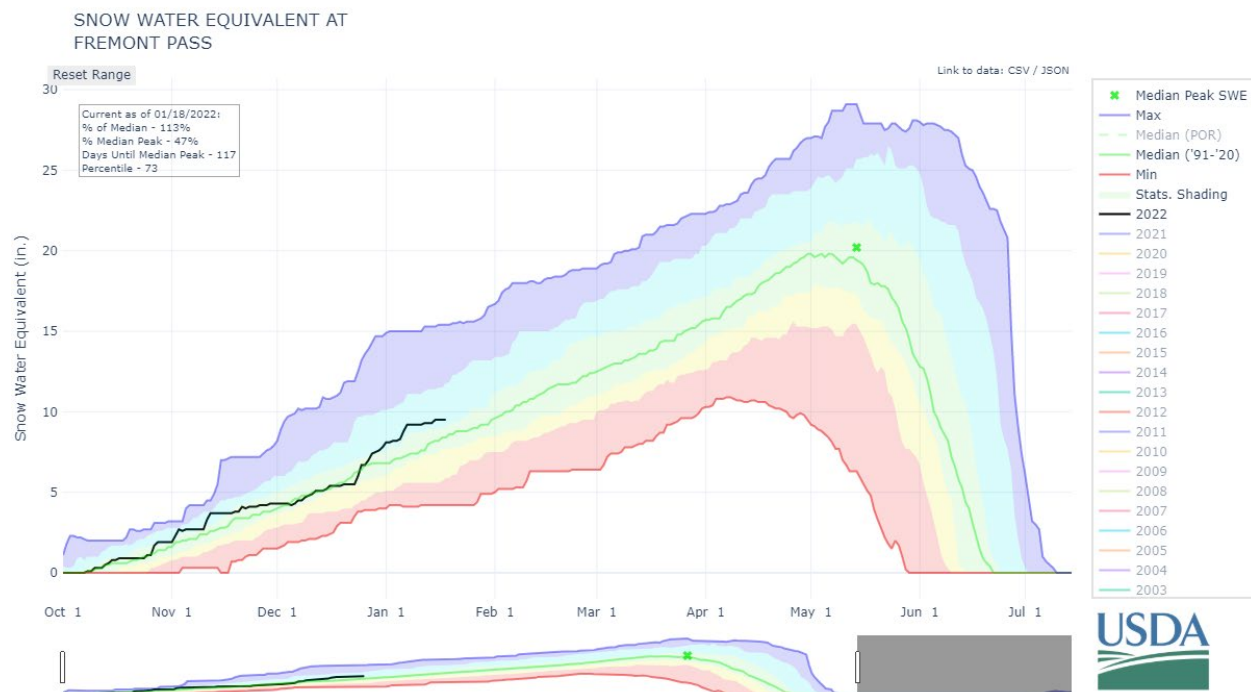


Figure 9. Snow Water Equivalent, Copper Mountain SNOTEL, Jan. 18, 2022 (USDA).

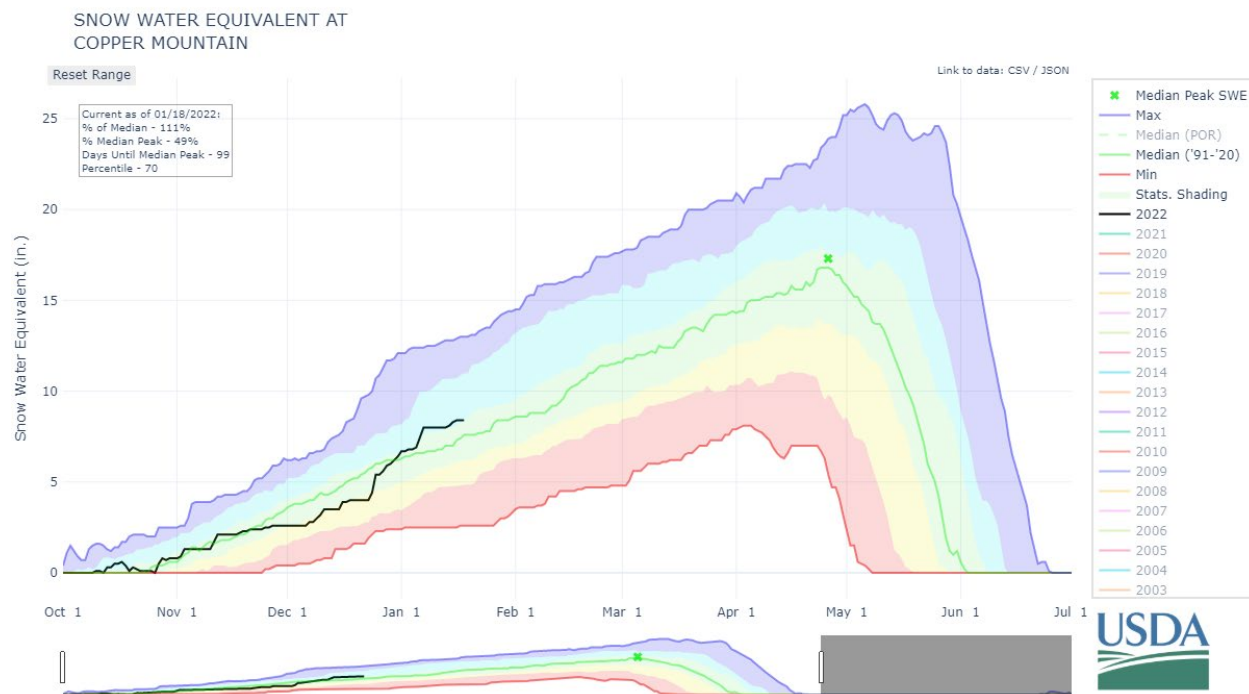
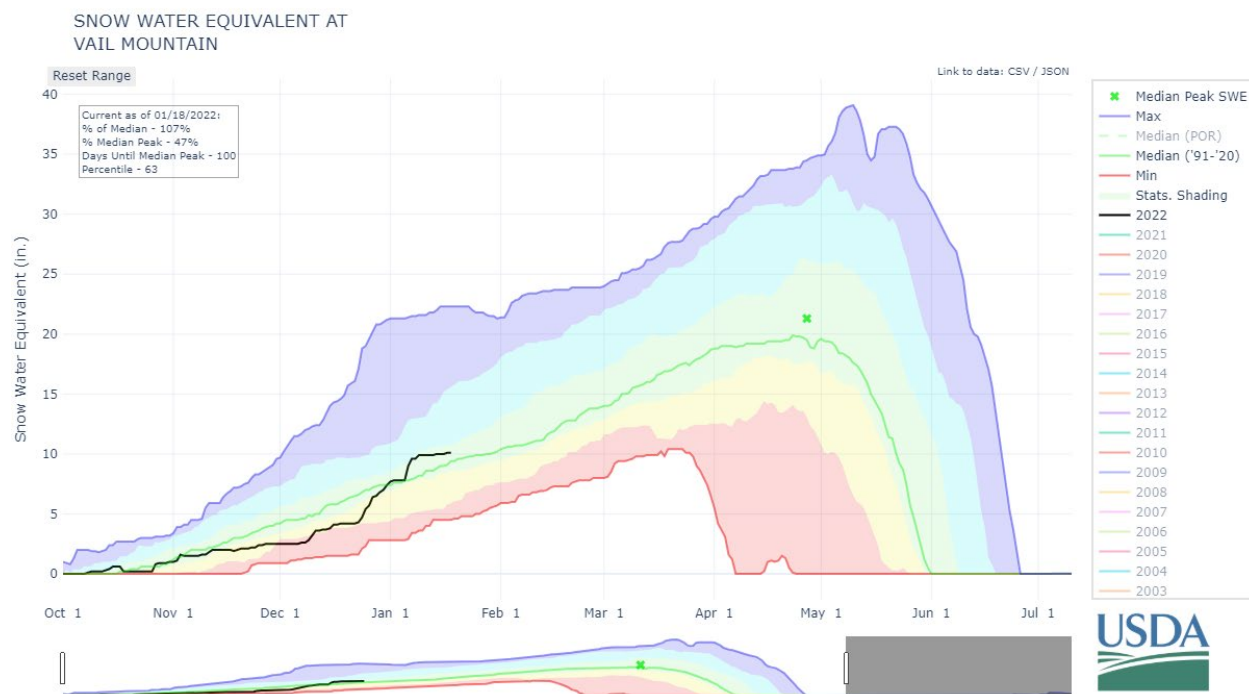


Figure 10. Snow Water Equivalent, Vail Mountain SNOTEL, Jan. 18, 2022 (USDA).



Streamflows remain low, even for the typically low-flow winter season. Largely due to recent past of higher than normal temperatures and low precipitation, baseflows across the region remain low. Stream hydrographs plotted from the USGS gages on Gore Creek above Red Sandstone Creek and the Eagle River at Avon are shown below in Figures 11 and 12.

Figure 11. Streamflow for Water Year-to-Date 2022, Gore Creek (CBRFC).

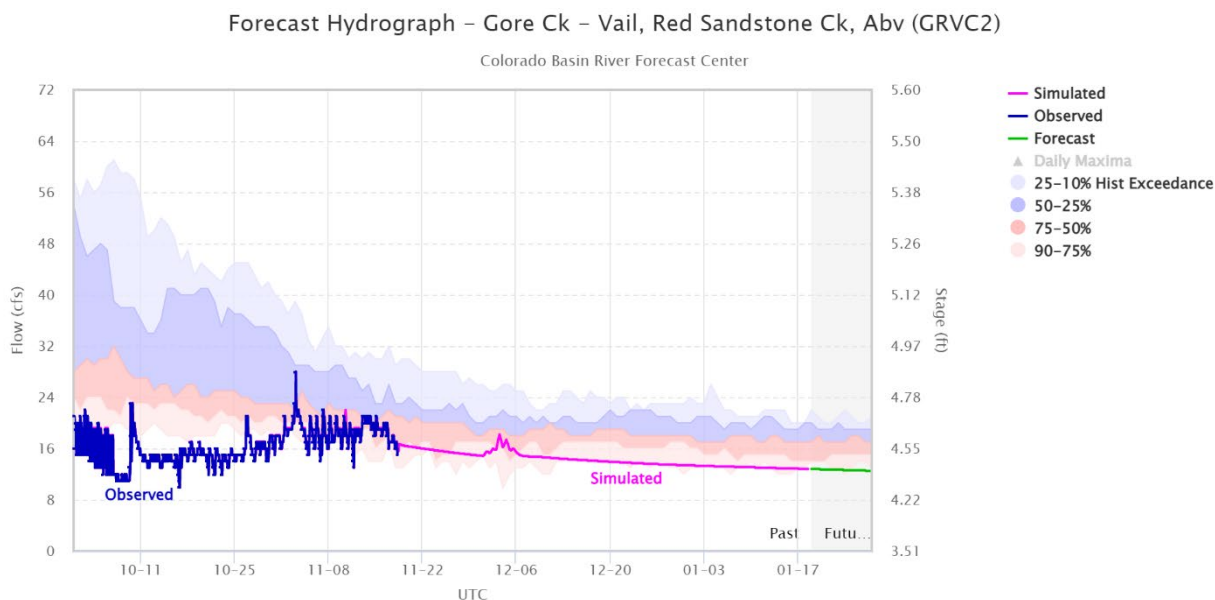
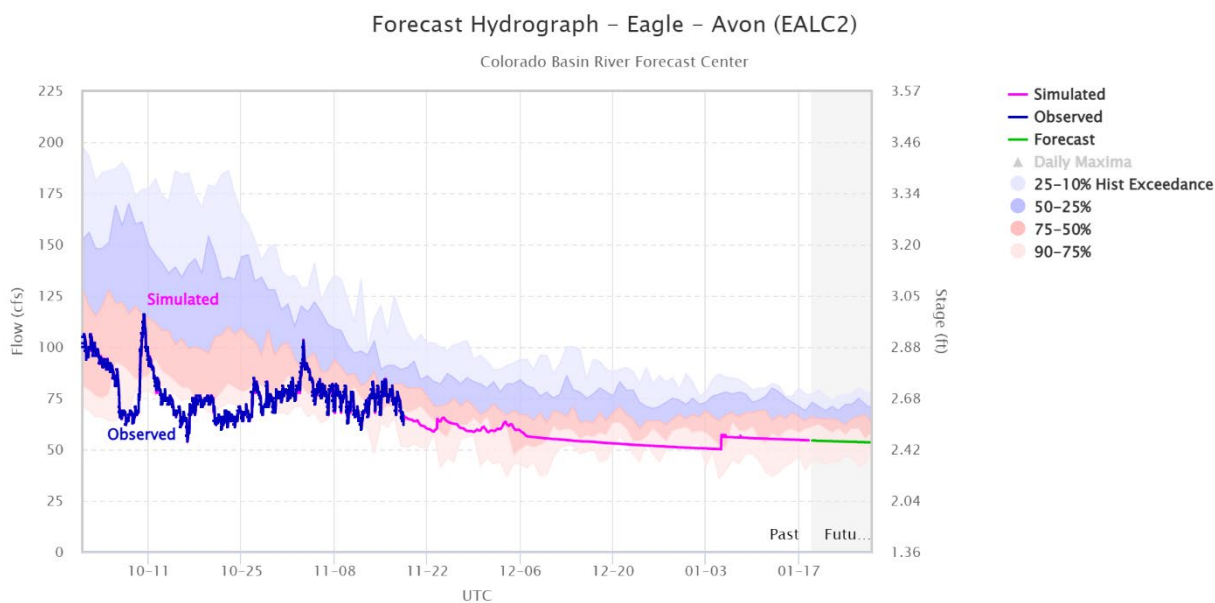


Figure 12. Streamflow for Water Year-to-Date 2022, Eagle River at Avon (CBRFC).



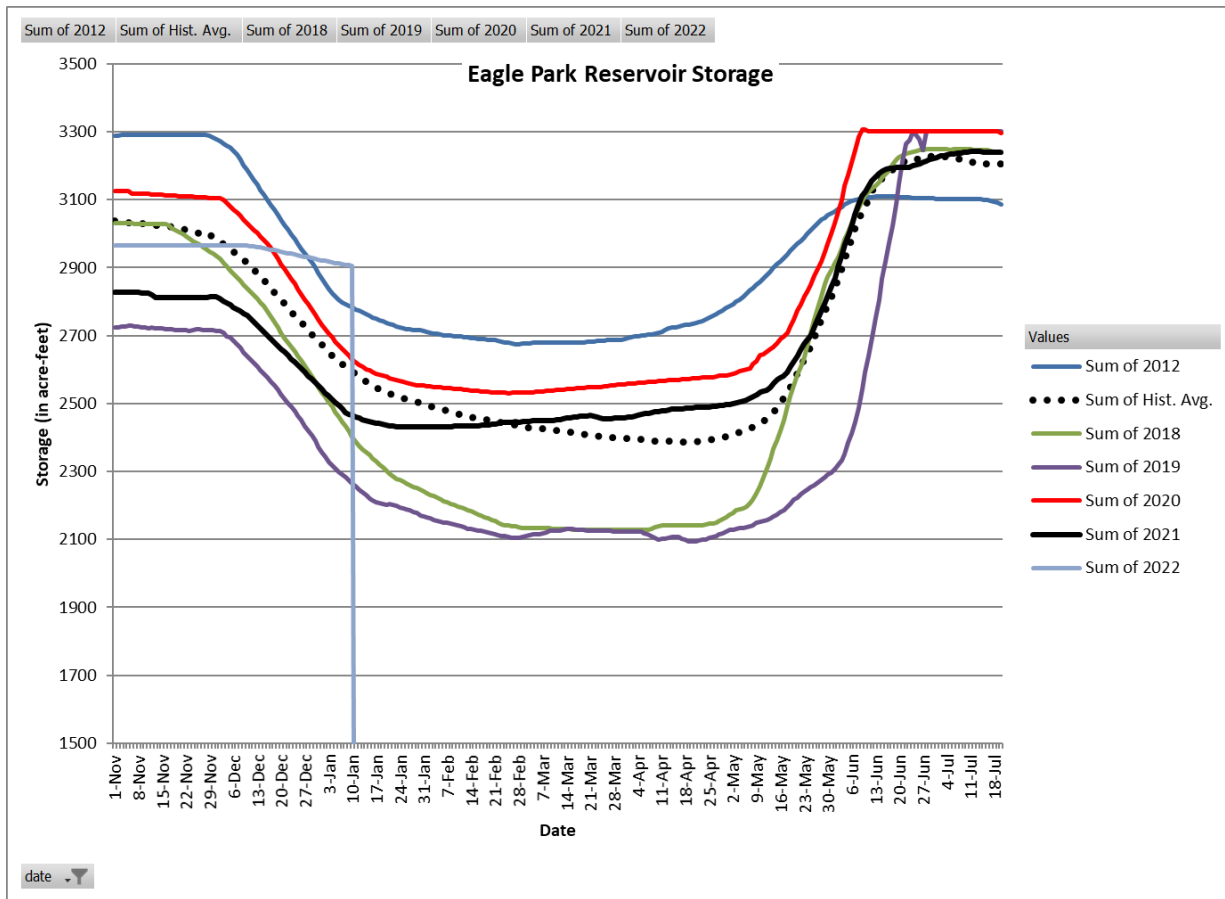
ERWSD and UERWA storage accounts are shown in Table 1 as of Jan. 1, 2022. Overall District and Authority accounts combined are at 85% full. District accounts are at 81.6% and Authority accounts are 88.7% full.

Table 1. ERWSD and UERWA Storage accounts as of Jan. 1, 2022 (Helton and Williamsen).

Reservoir	ERWSD		UERWA		TOTAL	
Green Mountain	567.4	61%	447.5	82%	1014.9	68%
Black Lakes	388.8	91%	300.0	100%	388.8	91%
Eagle Park	430.4	99%	676.9	99%	1107.3	99%
Homestake Res	164.2	66%	66.3	26%	230.5	46%
Wolford Mtn	500.0	100%	631.6	89%	1131.6	93%

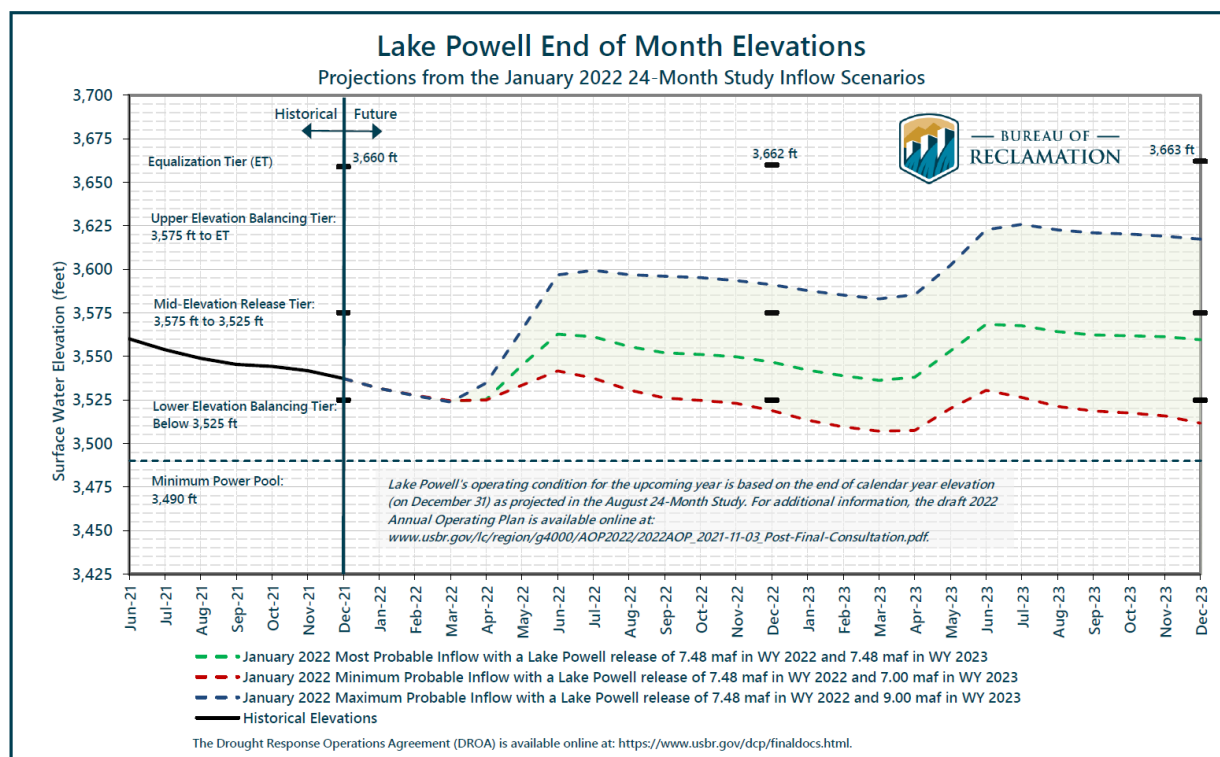
Eagle Park Reservoir contents compared with recent past years of interest is given below in Figure 13. The high storage value seen for the current year is well above average, reflecting the use of Homestake Reservoir accounts to meet downstream obligations this water year. If snowpack remains normal, or even dips below normal, it is highly likely that Eagle Park Reservoir will fill in 2022 runoff. If Homestake Reservoir accounts had not been used, Eagle Park storage would be much less, closer to the average condition for this time of year. This graph highlights the importance and value of strategically using the Homestake Accounts to preserve and firm other storage accounts.

Figure 13. Eagle Park Reservoir Storage (Helton and Williamsen, 2022).



Regionally, snowpack has followed suit and is at or above average. While Lake Powell is at historically low storage conditions, current projections by the US Bureau of Reclamation indicate it is unlikely to drop below the power pool elevation over the next 24 months. The current modeled level projection is shown below in Figure 14.

Figure 14. USBR Predicted Water Elevation (January 2022).



Current long-range forecasts from the National Weather Service show average conditions are expected for the next three months. Current maps are shown in Figures 15 and 16.

Figure 15. Three-month precipitation outlook (NOAA 2022).

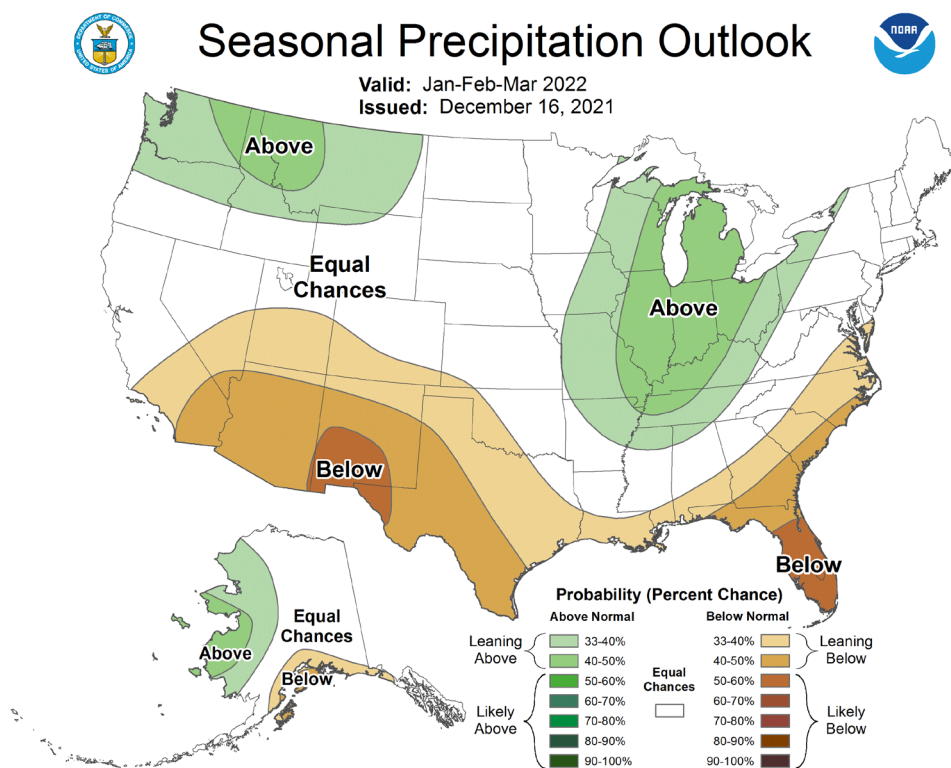
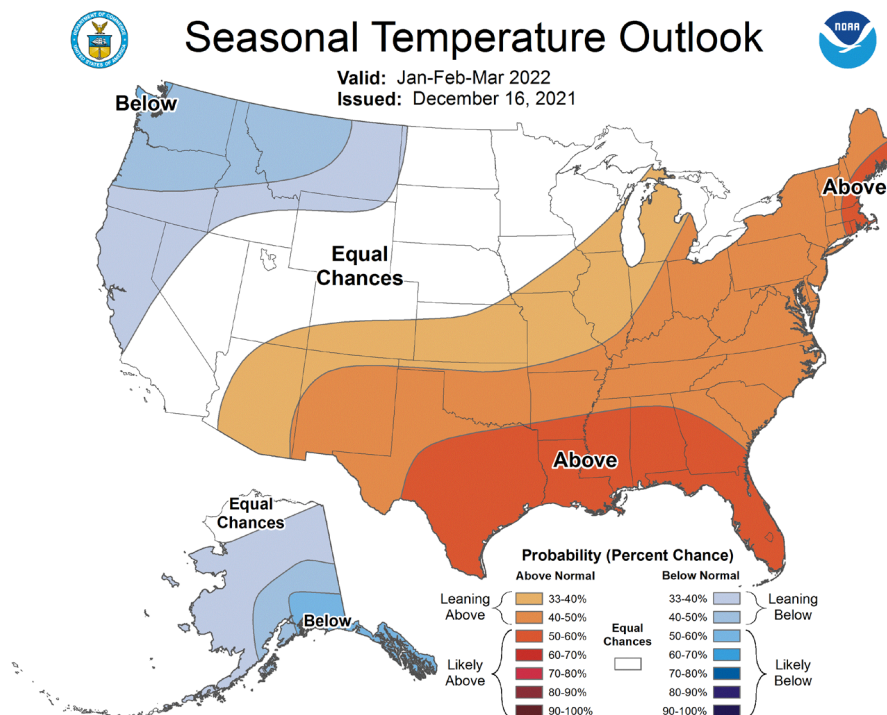


Figure 16. Three-month temperature outlook (NWS 2022).





MEMORANDUM

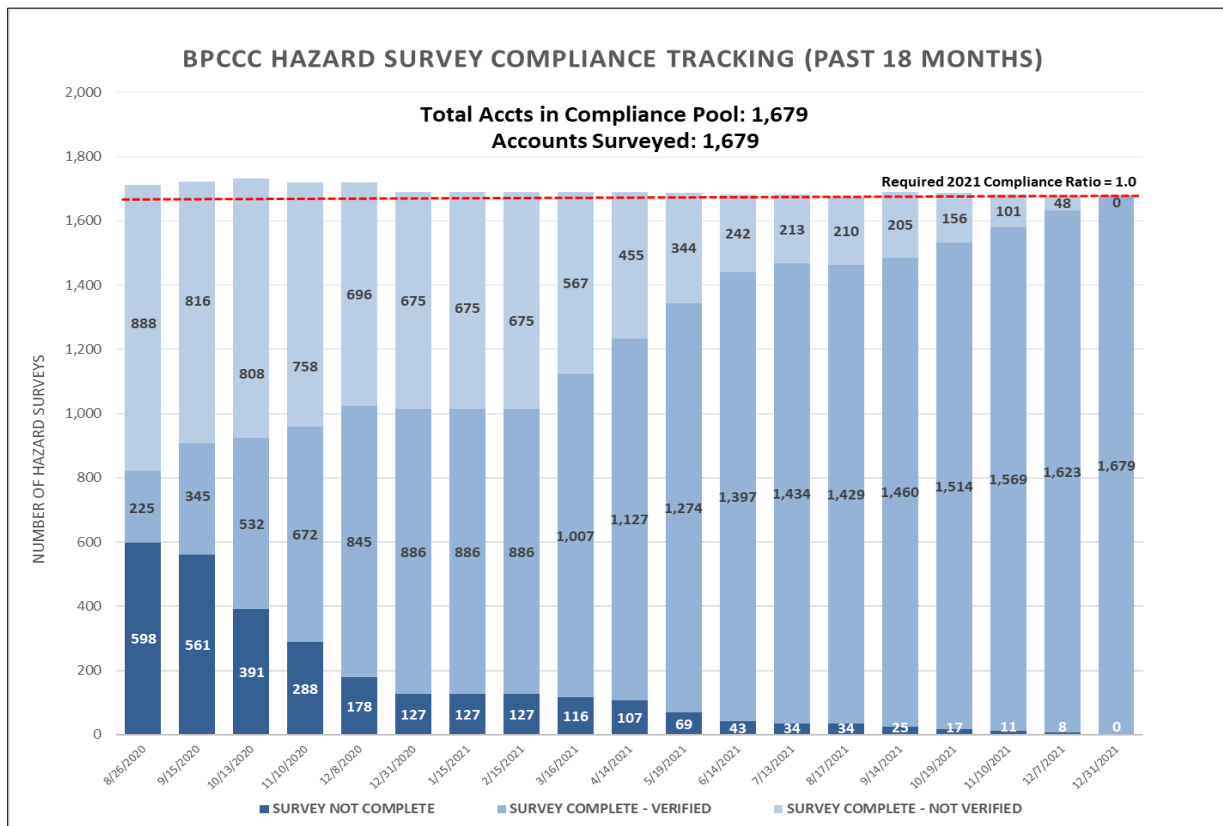
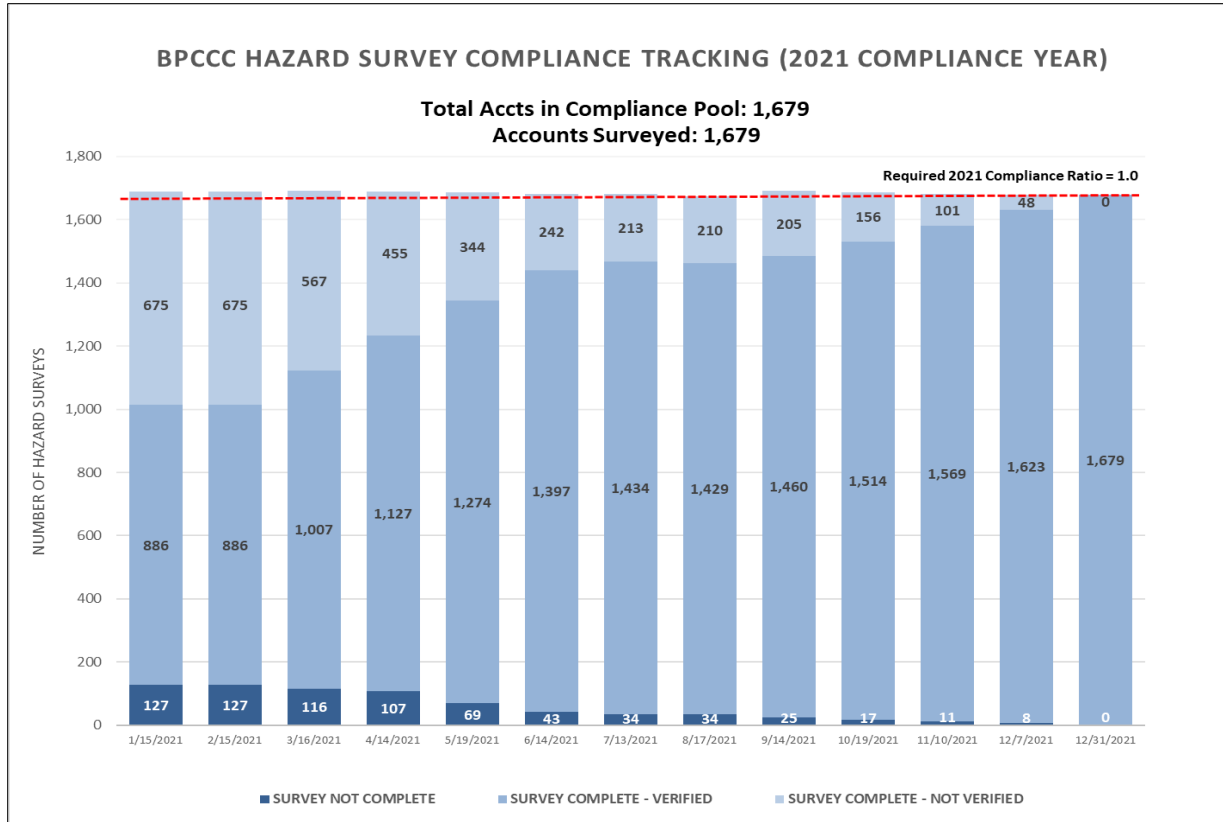
TO: Board of Directors
FROM: Shane Swartwout, Utility Services Manager
DATE: January 19, 2022
RE: Backflow Prevention and Cross Connection Control - 2021 Program Compliance

The purpose of this memo is to notify the board that staff has successfully met all Colorado Department of Public Health and Environment (CDPHE) backflow prevention and cross connection control (BPCCC) requirements and reached compliance with Colorado Primary Drinking Water Regulation 11.39 for the 2021 compliance year.

Calendar year 2021 was the final year of a CDPHE five-year escalating compliance schedule for hazard surveys and backflow prevention device annual testing. The Utility Services department was able to meet the required survey compliance ratio of 1.0 (100%) and exceed the required annual testing compliance ratio of .90 (90%) for both the District and the Authority. The Water Department was able to meet all BPCCC requirements for both the District's and Authority's waterworks sites.

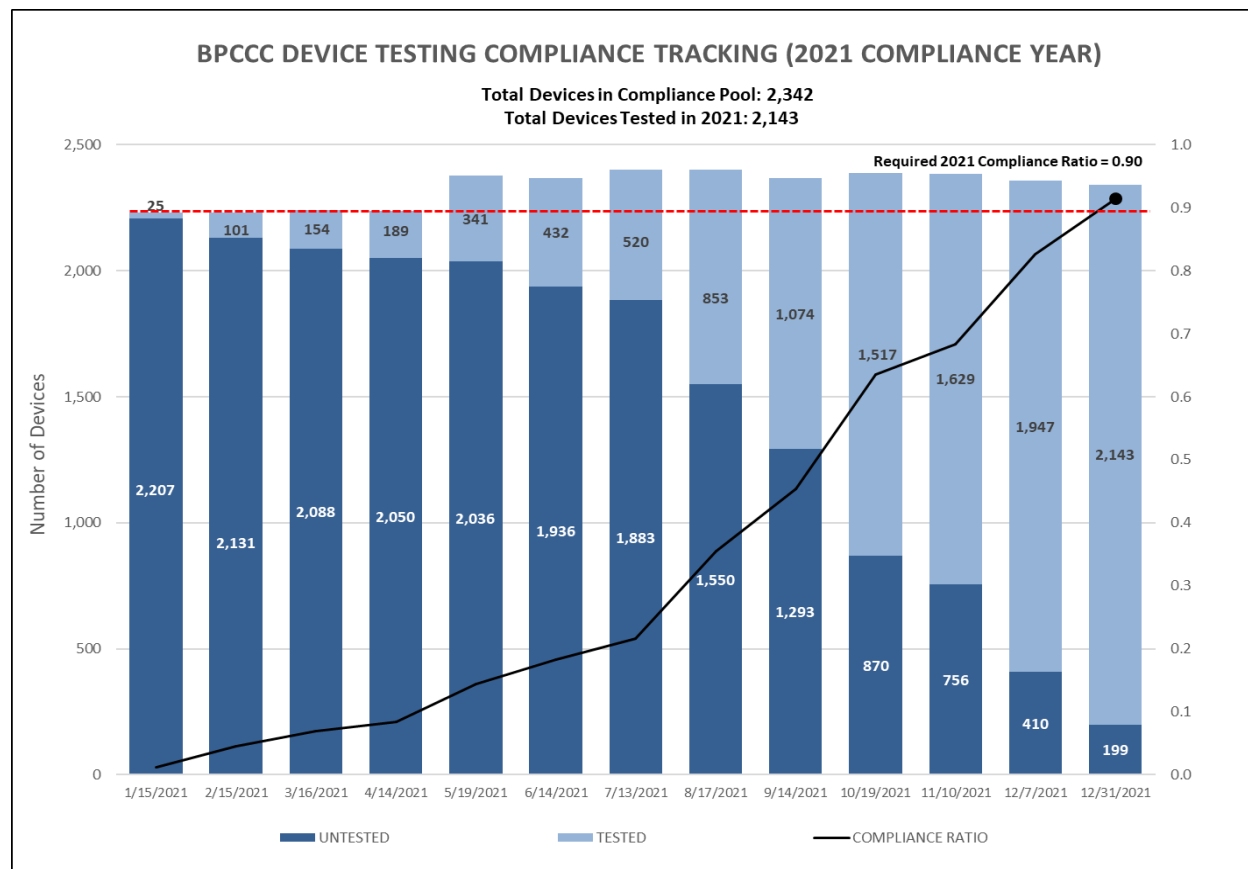
2021 - Survey Compliance Highlights

- 100% of the 1,679 compliance accounts have been surveyed by onsite inspection.
 - 648 District compliance accounts were surveyed by Dec 22, 2021.
 - 1,031 Authority compliance accounts were surveyed by July 1, 2021 (in preparation for the CDPHE Sanitary Survey).
- Approximately 70% of the compliance accounts needed corrective actions; over 50% of those accounts have been corrected.
- Staff created and mailed over 1,200 Survey Results letters to accounts that required corrective actions.
- A majority of the 1,200 accounts received multiple notification letters, fine notices, follow-up phone calls, and onsite consultations and final inspections.
- All uncontrolled cross connections were controlled within 120 days and no CDPHE extension were requested to date.



2021 - Device Testing Compliance Highlights

- An annual device testing compliance ratio of 0.92 (92%) was achieved in the District.
- An annual device testing compliance ratio of 0.91 (91%) was achieved in the Authority.
- Staff created and mailed over 1,500 reminder letters to customers for device testing.
- All devices that failed testing were repaired or replaced within 120 days of the failed test and no CDPHE extension were requested to date.



2021 - Program Development Highlights

- Staff created the ERWSD written BPCCC program document. This clearly outlines all procedures and duties associated with the implementation of the 2021 BPCCC program to meet the requirements of Regulation 11, section 11.39(2)(a).
- Utility Services Department held an onsite workshop with several local landscaping companies and certified backflow testers.
- Staff upgraded all construction meter backflow prevention devices with new single-unit meter and reduced pressure (RP) backflow assemblies. This provides the highest level of protection for our fire hydrants against construction site hazards and ensures accurate water metering.
- Created workflow processes and SOPs for every area of the BPCCC program:

- Onsite Hazard Surveys
- Survey Results and Corrective Actions Tracking
- Device Testing Tracking
- Test Report Processing
- Tester Certification Verification
- Fines and Penalties for BPCCC noncompliance Tracking
- Completed a comprehensive audit of all 1,075 Authority compliance accounts prior to the August 18, CDPHE Sanitary Survey.
- BPCCC staff tested over 100 devices at the end of the year to help reach our device testing compliance ratio requirement.

As shown above, staff has made significant enhancements to the BPCCC program and was successful in reaching compliance in 2021. The entire team is extremely busy with the ongoing development of the BPCCC program to meet changing requirements and ensure regulatory compliance in 2022.



MEMORANDUM

TO: District and Authority Board Members
FROM: Leah Cribari, Laboratory and Regulatory Compliance Supervisor
DATE: January 19, 2022
RE: 2020 Macroinvertebrate Sampling Results

Background:

Benthic macroinvertebrate community characteristics are commonly used as biological indicators of water quality and stream health conditions. Most macroinvertebrate taxa have relatively long aquatic life stages, limited mobility, and specific adaptations to the environment that make certain taxa sensitive to different types of stress from pollutants or habitat disturbance. In 2010, the Colorado Water Quality Control Commission (WQCC) adopted Policy Statement 2010-1. This Policy Statement details the methodology for using macroinvertebrate population metrics for assessment of aquatic life use attainment in streams and rivers. This methodology is based upon a multi-metric index (MMI) score for determining whether or not a stream is in attainment of the aquatic life use. In 2012, the WQCC added Gore Creek to the state's 303(d) list for aquatic life use impairment with a "provisional" qualifier indicating that the cause of impairment was not known. Today, Gore Creek remains provisionally listed for aquatic life use impairment.

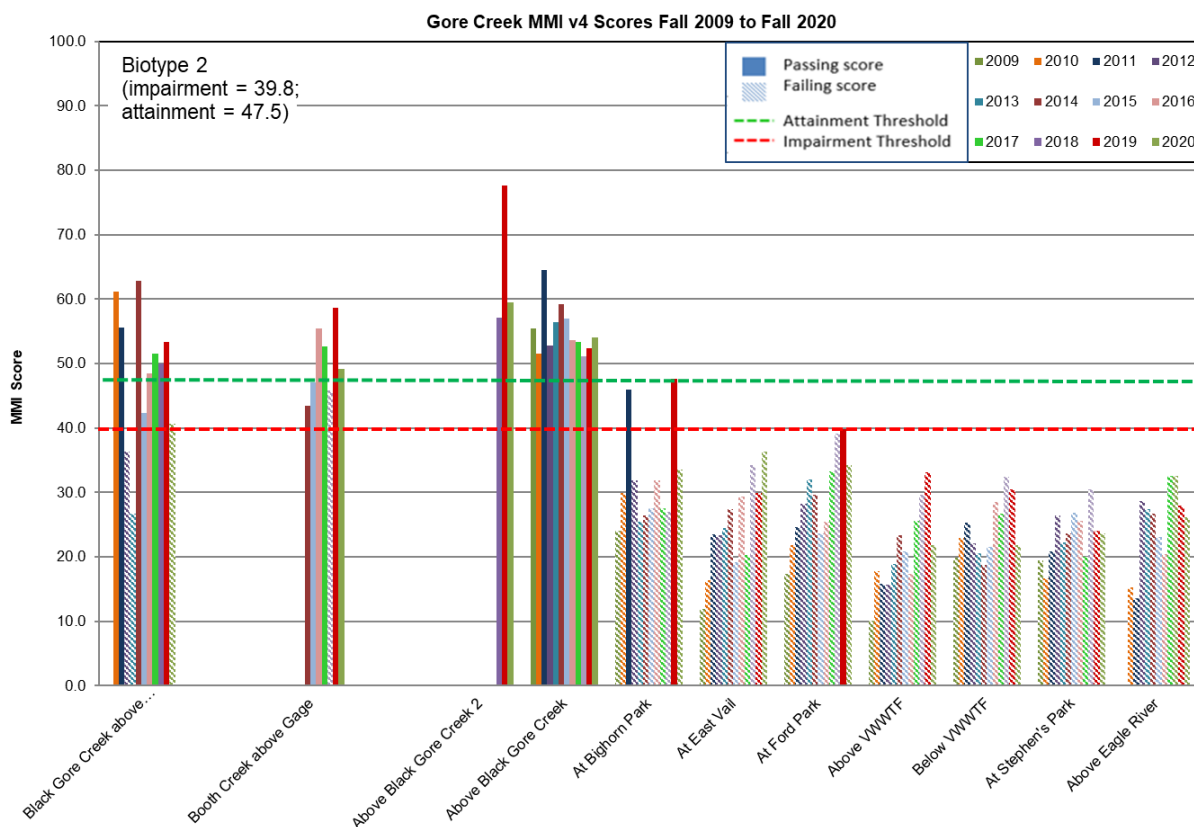
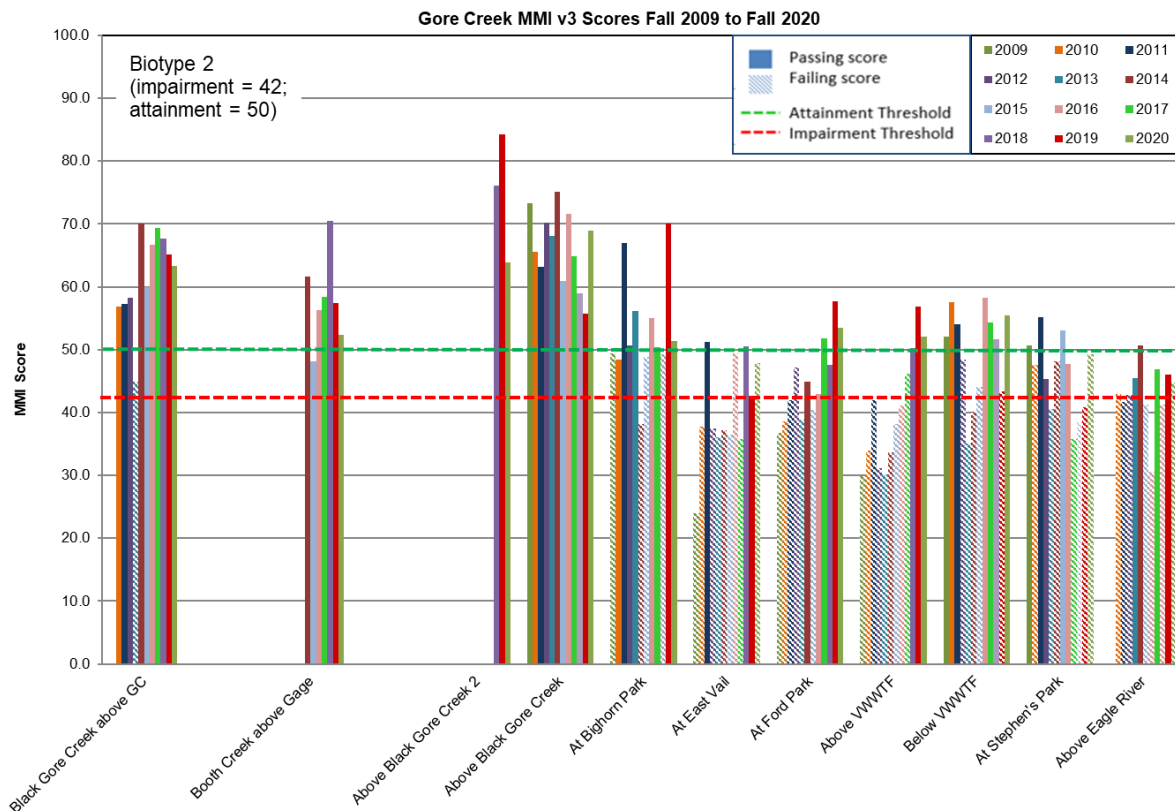
The figures below were produced to show the MMI scores for 2009 through 2020 at the sampling sites on Gore Creek, Black Gore Creek, Red Sandstone Creek, and the Eagle River. The figure includes sampling sites from upstream (left) to downstream (right). On each figure, the green dashed line represents the aquatic life use attainment threshold and the red dashed line represents the impairment threshold. The space in between these two lines is referred to as the "gray zone" where two auxiliary metrics (Shannon Diversity and Hilsenhoff Biotic Index) are used to determine attainment. If a sample produces an MMI score in the "gray zone," but fails either one of the auxiliary metrics, the site is deemed "impaired." Sites with failing scores, or "aquatic life use impairment," are represented by bars with crosshatch fill, while bars with solid fill indicate attainment. Eleven years of data are now available at most sites within the study area.

MMI Version 3 (v3) versus Version 4 (v4):

In 2017, the MMI v3 was recalibrated and updated to produce a new analysis tool, the MMI v4 (Colorado Department of Public Health and Environment 2017). Both versions of the MMI (v3 and v4) utilize several individual metrics to assess the health of aquatic communities in Colorado streams. When using either version of the MMI, the individual metrics (components) of the tool will automatically change depending on the location of the study site (high mountains, transitional areas, or plains). Scores are based on a scale from 0 to 100, and thresholds were set to determine “attainment” vs. “impairment.” The differences between v3 and v4 mostly occur in the selection of individual metrics that were used to construct the index. The MMI (v4) uses eight equally weighted metrics to provide a single index score, whereas the MMI (v3) used five or six. Many of the individual metrics utilized in the MMI (v4) were not used in the MMI (v3). Consequently, the two versions of the MMI emphasize and evaluate different characteristics of the macroinvertebrate community. At high elevations the MMI (v4) appears to put greater emphasis on the presence (or absence) of the most sensitive taxa. This creates an “all-or-none” effect, where moderately sensitive taxa have less influence on the final score. Since the components of the MMI have changed, the thresholds used to measure “attainment” vs. “impairment” have also changed. The MMI v3 and v4 were essentially constructed in the same way but use different components to measure different aspects of the health of aquatic life.

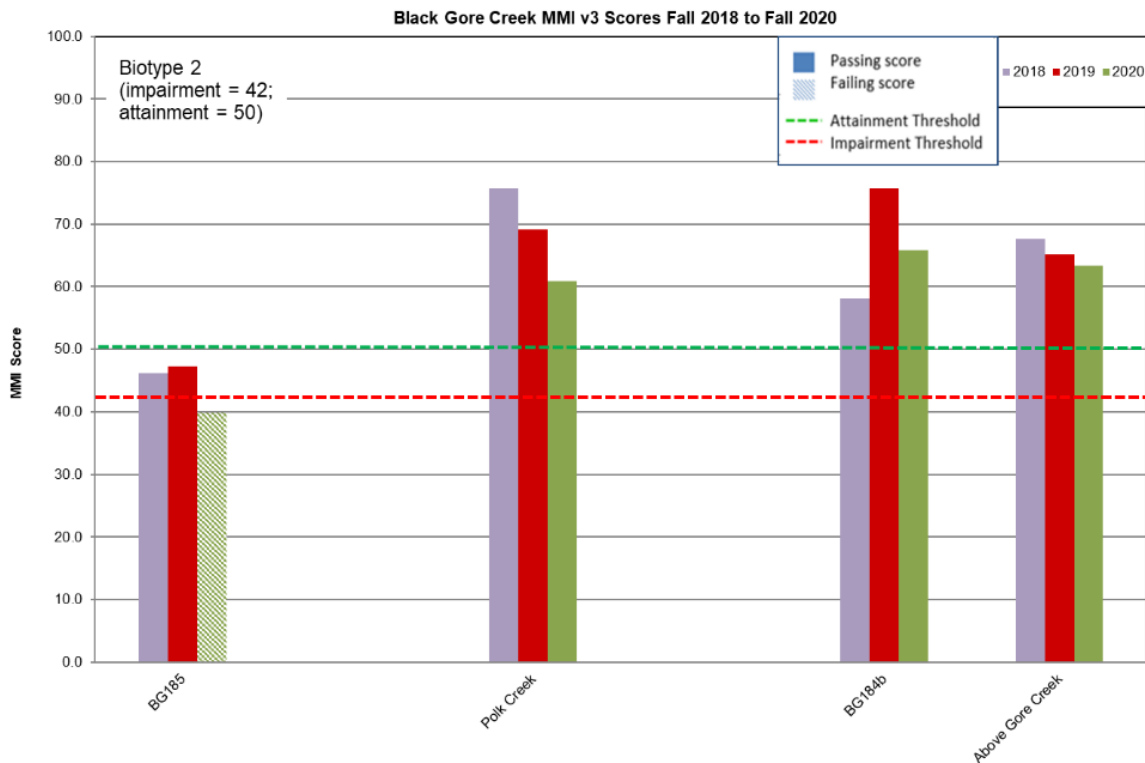
Gore Creek:

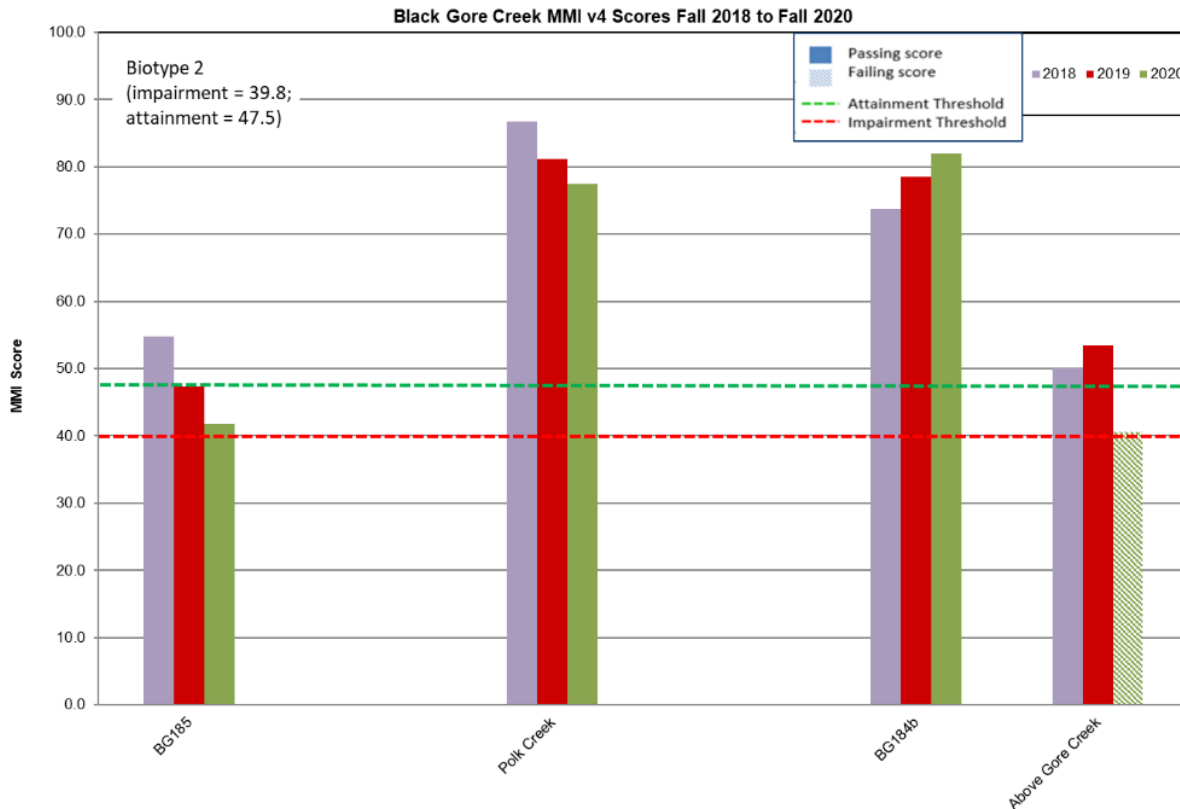
Gore Creek continues to show improved MMI scores using v3, which indicates that the *Restore the Gore* management strategies are working. In 2020, all sites except East Vail, Stephen’s Park, and Gore Creek above Eagle River had attaining scores using v3. MMI v4 is more stringent on mountainous regions, thus bringing the scores below attainment on most of Gore Creek. In 2018, a sampling site was added above the East Vail campground as a new reference site. In 2019, there was a significant reduction in the MMI scores from above the campground to below the campground, indicating increased stress, but in 2020 the decrease in scores was not as significant. In 2020, impairment begins at Bighorn Park. In 2020, decreases in MMI v4 scores are most likely due to lower stream flows.



Black Gore Creek:

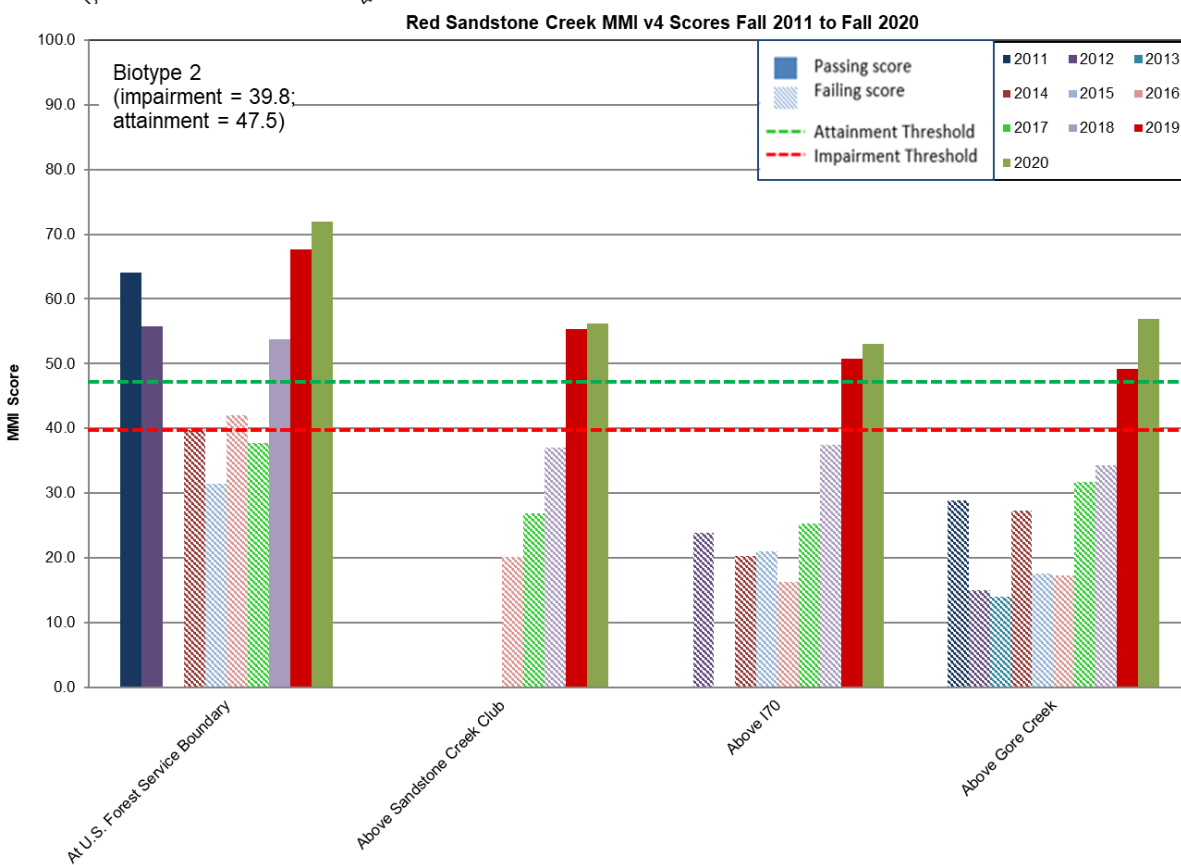
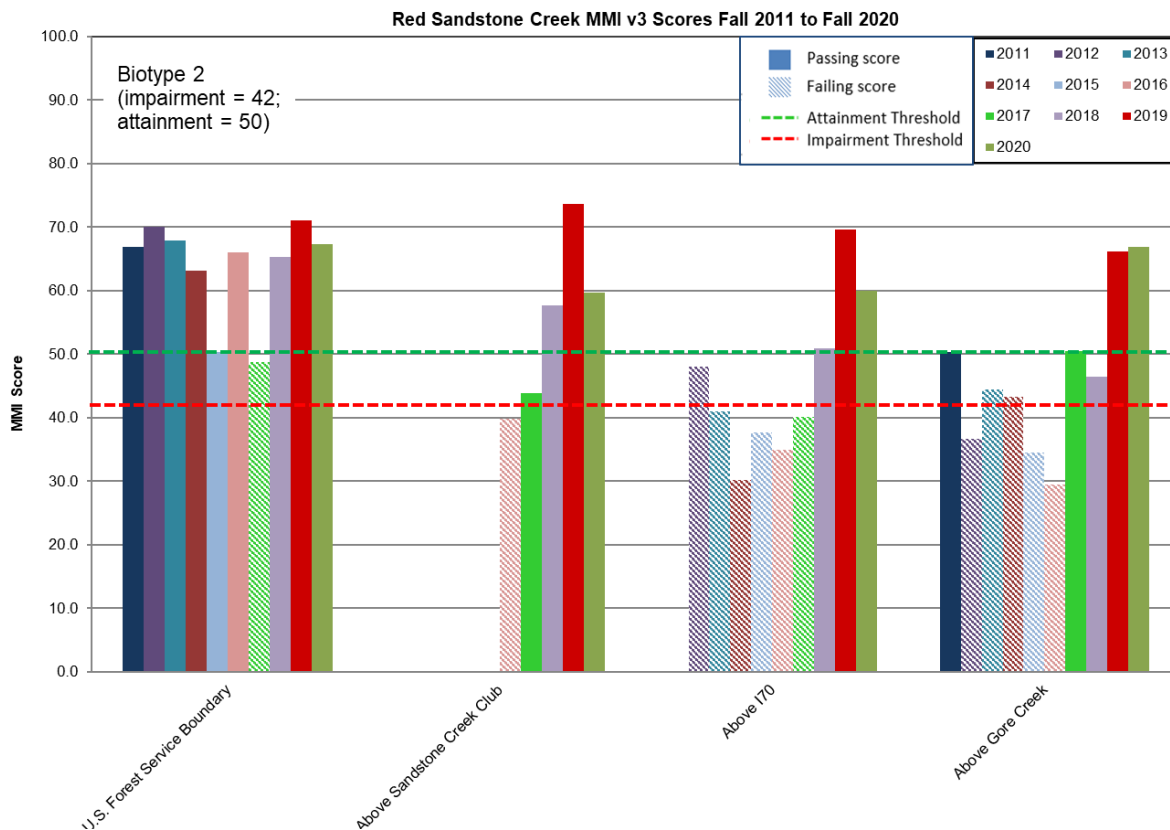
In 2018 and 2019, six sites were sampled on Black Gore Creek. The purpose of adding these sites was to develop comprehensive background data on Black Gore Creek. This background data will be an important metric to track water quality impacts of the I-70 West Vail Pass Auxiliary Lanes construction project. In response to the District's request for CDOT to monitor water quality in Black Gore Creek, CDOT contracted David Rees to sample BG188, BG186, Above Miller Creek, and BG183 (numbers represent highway mile marker locations) in 2020. CDOT has committed to collecting and sharing data at these sites for the next 5 years, thereby reducing ERWSD sampling costs. MMI v3 shows impairment at BG185. MMI v4 shows impairment at Above Gore Creek. Dave Rees commented in MMI v3, BGC185 sediment disposition affected the score. MMI v4 Above Gore Creek, sensitive taxa is present but in lower numbers, low flows in 2020, and more sediment deposition affected the score.





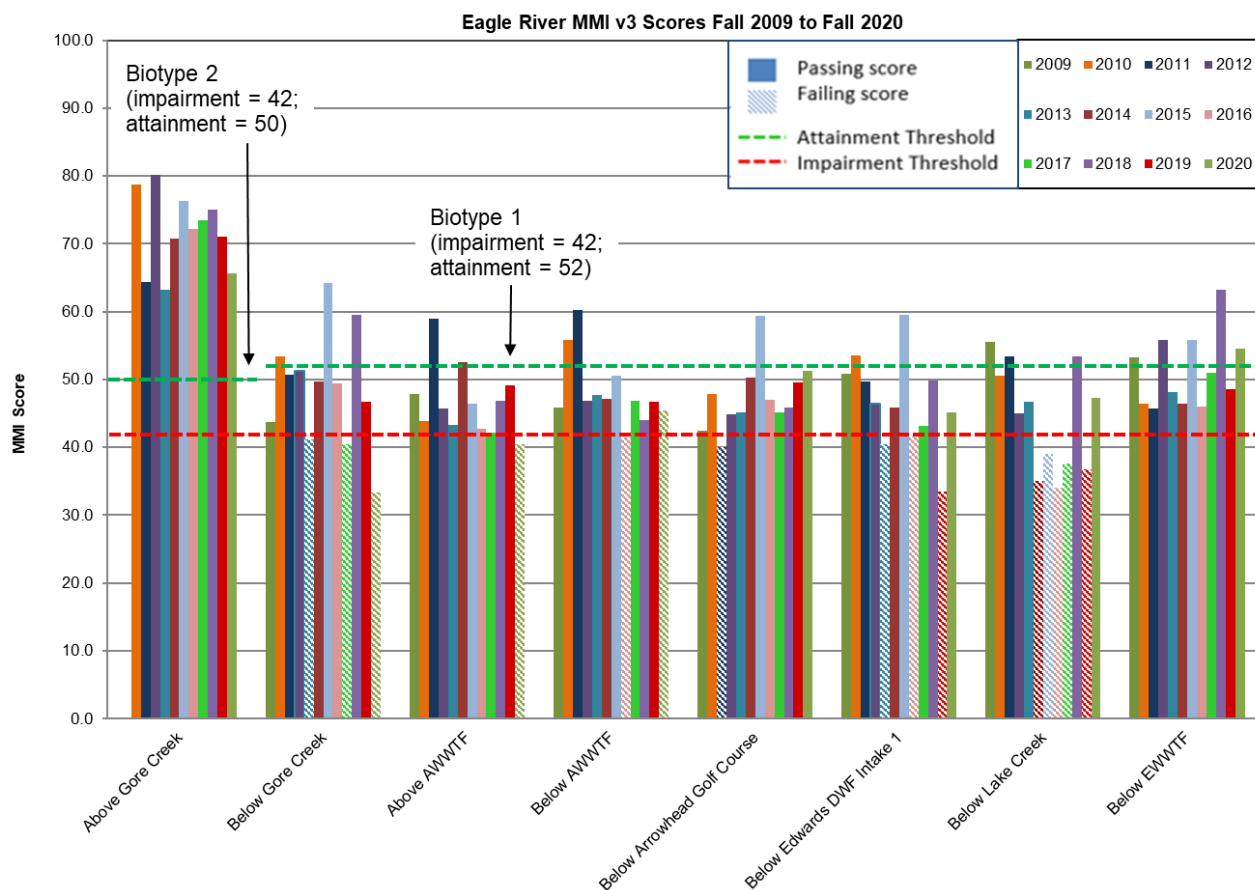
Red Sandstone Creek:

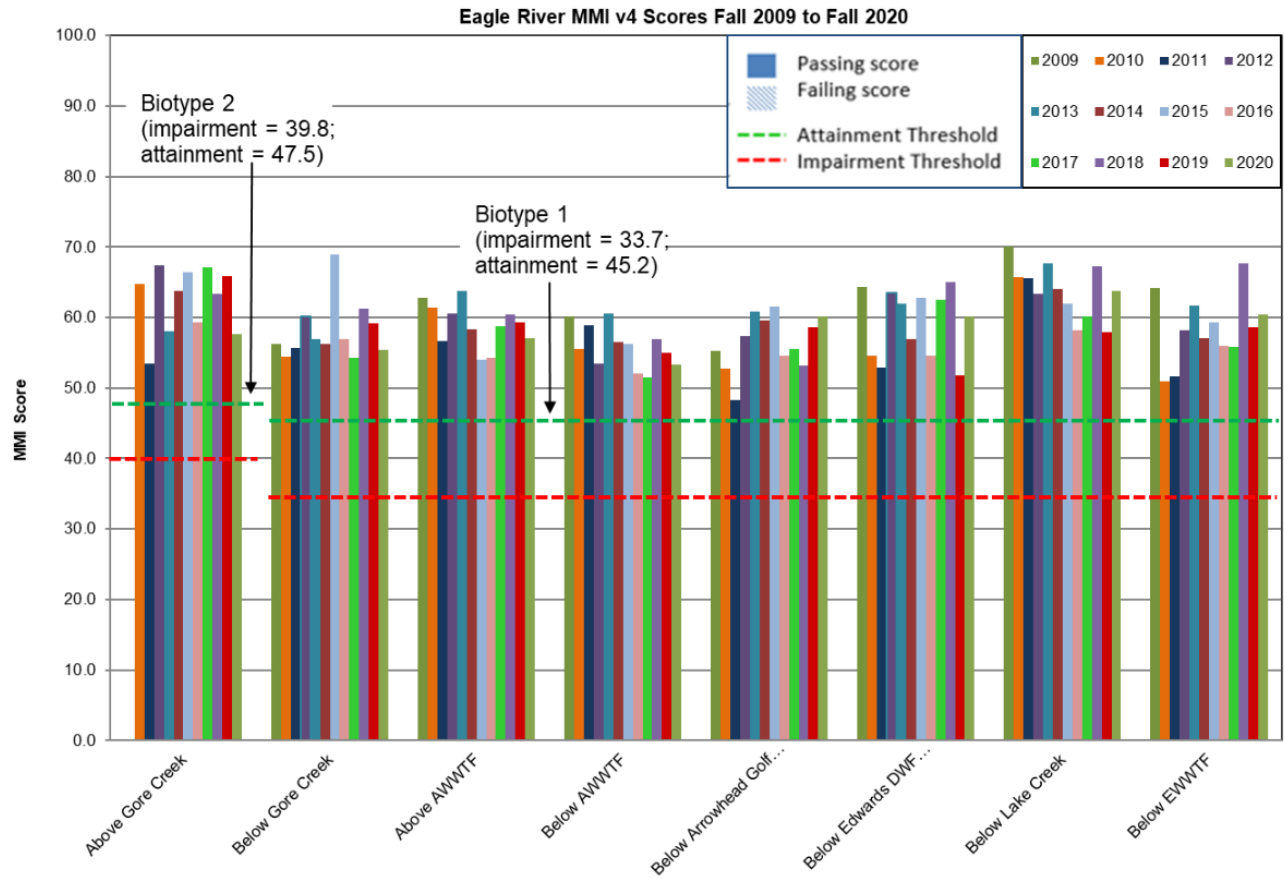
All sampling sites on Red Sandstone had passing MMI scores in 2020 using the v3 and v4 metric tool; this is the second year in a row that all four sites were passing using both versions. For the past few years, Town of Vail staff has been working to improve the riparian and landscape practices along Red Sandstone Creek. Peter Wadden has spoken to numerous homeowners along the creek regarding this matter. The recent improved results show that his education and outreach efforts continue to help improve the conditions.



Eagle River:

The 2020 MMI v4 scores for the Eagle River were all passing.





Bushong & Holleman PC

A t t o r n e y s • a t • L a w

1525 Spruce Street, Suite 200, Boulder, Colorado 80302

MEMORANDUM

To: Eagle River Water & Sanitation District Board
Upper Eagle Regional Water Authority Board

From: Steve Bushong

Date: January 20, 2022

RE: Update on the Molybdenum Rulemaking

Summary of Prior and Pending Molybdenum Rulemaking. In 2017, Climax Molybdenum Co. (“Climax”) proposed to modify the molybdenum standards on a statewide basis in Colorado. The proposal was to modify the existing 210 ug/L standard for domestic water supply uses to 9,000 ug/L, and to modify the existing 160 – 300 ug/L standard for agricultural use to 1,000 ug/L. The domestic water supply proposal was based on rat toxicology studies and the agricultural use standard was based on a study of cattle in feedlot conditions. The District and Authority (and Eagle Park Reservoir Company) are parties to that rulemaking and have coordinated with others in engaging a world-renowned expert who is strongly critical of the Climax proposal for domestic water supplies. Another expert used by the stakeholders is critical of the proposed agricultural standard. However, prior to the scheduled 2017 rulemaking hearing, Climax delayed the hearings to allow the Agency for Toxic Substances and Disease Registry (“ASTDR”) to complete a federal review of molybdenum toxicity. The rulemaking has been stayed for nearly five years.

During the past 5 years, Climax needed to obtain temporary modifications of the standard in Ten Mile Creek because it cannot meet existing standards. The District and Authority had limited involvement in the first temporary modification to insist that Climax conduct investigations on treatment and management alternatives to reduce the scope of the molybdenum problem and the Water Quality Control Commission agreed. From those investigations, we learned that virtually all molybdenum contamination currently results from effluent from the treatment plant which was not designed to treat for molybdenum. Effluent concentrations into Ten Mile Creek approach 4,000 ug/L. We also learned that optimizing the existing treatment plant could reduce that effluent concentration to 200 – 500 ug/L at a capital cost of about \$26M (not including operational costs), while a new treatment plant would cost in excess of \$100M. Climax has distanced itself from the lower cost estimates at various meetings.

Scope of Molybdenum Contamination. Molybdenum concentrations were historically an issue in the Eagle River watershed but have greatly improved. We believe this is due, in large part, to the remediation of the oxide tailings pond that became Eagle Park Reservoir. In contrast, molybdenum concentrations approaching 2,000 ug/L during low flows are observed downstream

on Ten Mile Creek at Copper Mountain. That is about an order of magnitude higher than the standard. This is consistent with historical data from when the mine was previously operating (limited historical data showed maximum annual concentrations of 2,000 – 2,500 ug/L at Copper Mountain). The molybdenum contamination is widespread. Downgradient public facilities on well water have had molybdenum concentrations approaching or exceeding EPA's health advisory of 40 ug/L at the tap (Silverthorne Rec. Center and Summit County Library – North Branch). To put this in context, molybdenum concentrations in uncontaminated areas are usually closer to 1 ug/L. Denver Water is also measuring significant molybdenum concentrations below the Roberts Tunnel and has even observed molybdenum concentrations approaching the health advisory level at its Front Range drinking water facility. The study by Climax shows that higher concentrations of molybdenum are discharged when they are mining oxidized molybdenum. Climax has modified its mining plans to avoid oxidized materials during the temporary modifications. Climax has indicated, however, that it plans to eventually mine the oxidized ore.

Recent Developments. The ASTDR review of molybdenum was completed and did not support the Climax proposal. Although the review considered the new rat toxicology studies, it also relied upon earlier toxicology studies that showed toxicity at lower concentrations. Climax held a stakeholder meeting recently during which it stated its intent to reset the pending rulemaking for a hearing sometime between December 2022 and June 2023. Climax is taking issue with the safety factors and other variables used by ASTDR. Similar issues were in dispute by Climax leading up to the previously scheduled rulemaking and before the ASTDR review. Climax is also apparently trying to duplicate the older toxicology studies in another way to support relaxing the current molybdenum standard. Although not entirely clear, Climax may lower somewhat its proposed molybdenum standard at the hearing to be scheduled. Climax has also been conducting more cattle studies to support its molybdenum proposal for the agricultural standard, but we have not been following that as closely.

The District and Authority remain parties to the rulemaking on the statewide molybdenum standards. Unless the Boards want to change their position, the plan is to continue working with other interested parties and experts and participate in the rulemaking to ensure the molybdenum standards are appropriate and scientifically defensible.



MEMORANDUM

TO: District and Authority Boards of Directors
FROM: Jason Cowles, P.E. 
DATE: January 19, 2022
RE: Director of Engineering & Water Resources Report

Authority Unallocated Water Update

I had committed to provide the Authority Board with an update on my projections of unallocated water following changes to proposed land uses for the Riverwalk PUD amendment and the Northstar PUD amendment. These changes resulted in a marginal increase in the Authority's unallocated water. I currently project that the Authority's unallocated water includes 54.57 acre feet of unrestricted in-basin storage remaining, 78.13 acre feet of in-basin storage committed to workforce housing, and 98.66 historic consumptive use credits.

The Eagle County School District is proposing to construct 37 workforce housing units on the Battle Mountain High School property in Edwards which is part of the Berry Creek PUD, 5th Filing. After reviewing the Berry Creek PUD and past water dedications with Tom Williamsen, I believe that the School District's housing will be covered by previous water rights dedications and the associated water use was included in our buildout projection for Berry Creek. Therefore, the ESCD housing will not require a water rights dedication and does not impact the unallocated water.

Attachments

Authority Surplus Augmentation Supply, Updated 2022-01-19

Authority Surplus Augmentation Supply

Updated: 1/19/2022 by JEC

	HCU's, acft	In-basin Reservoir Storage, acft	In-basin Reservoir Storage, acft	Out-of-basin Reservoir Storage, acft	Total HCU & In-Basin Storage, acft
	Summer only	Affordable Housing Reserve	Unrestricted		
Modeled Augmentation Surplus¹	105.70	87.40	127.30		320.40
Projects with Ability to Serve Letters					
Club Residences at CVC	0.04		1.04	0.03	1.08
Current Augmentation Surplus²	105.66	87.40	126.26		319.32
Augmentation Projections for Projects in Land Use Entitlement Process					
Edwards River Park PUD	5.52	9.27	53.54	1.89	68.32
Mountain Hive	1.27		13.56	0.39	14.83
NorthStar PUD Amendment	0.12		2.90	0.09	3.02
Warner Building Dormitories	0.02		0.02	0.01	0.04
Riverwalk PUD Guide Amendment	0.07		1.67	0.05	1.74
Total Pending Augmentation	6.99	9.27	71.69	2.43	87.95
Projected Augmentation Surplus	98.66	78.13	54.57		231.36

Notes:

- 1) Modeled Augmentation Surplus based on June 25, 2020 unallocated model runs adjusted for Edwards River Park changes.
- 2) Current Augmentation Surplus Projection considers all projects with Ability to Serve Letters to be allocated.
- 3) Projects in Land Use Entitlement Process have Conditional Capacity to Serve Letters but have not yet received land use approvals or completed the Authority's water rights dedication process.
- 3) Affordable Housing Reserve In-basin Reservoir Storage is Eagle Park water transferred to UERWA by Eagle County and can only be used for affordable/workforce housing projects.
- 4) Unrestricted In-basin Reservoir Storage includes 25 acft pledged by ERWSD.
- 5) Out-of-basin Reservoir Storage supplies include 711 acft Wolford Mtn. Res. Contracts and 475 acft Green Mtn. Res. Contracts.
- 6) The Authority's existing commitment of 34.3 acft of augmentation for the West End PUD is included in the modeled augmentation surplus.



MEMORANDUM

TO: Boards of Directors
FROM: Diane Johnson, Communications & Public Affairs Manager
DATE: January 27, 2022
RE: Communications and Public Affairs Report

2022 Colorado Legislative Session

The second regular session of the 73rd Colorado General Assembly convened Jan. 12 and is scheduled to adjourn May 11. Kerry Donovan and Dylan Roberts continue to represent Eagle County in the Senate and House, respectively. They both serve on committees that handle water matters. Donovan chairs the Senate Agriculture & Natural Resources committee while Roberts serves on the House Agriculture, Livestock, & Water committee. We will monitor the session as in previous years: via legal counsel, the River District, NWCCOG QQ, Colorado Water Congress, the Special District Association, and industry groups. The district and authority are not pursuing or actively involved in any legislation this session.

Colorado River District

Eagle County reappointed Commissioner Kathy Chandler-Henry as their Director on the Colorado River Water Conservation District board of directors. At the River District's Jan. 18 board meeting, she was re-elected Vice President of the board. Marti Whitmore, Director for Ouray County, remains President.

Colorado River Basin supplies – the 500+ Plan

In December, the Lower Basin states (AZ, CA, NV) and the U.S. Bureau of Reclamation announced the 500+Plan that responds to the need for additional reductions in water use from Lake Mead, over and above those required by the [2007 Guidelines](#) and [Drought Contingency Plan](#). The goal is to conserve an additional 500,000 acre-feet or more per year – beyond DCP reductions — to benefit Lake Mead.

Attachments (or hyperlinks):

1. Dec. 15 Joint News Release: *Water agencies announce partnership to invest \$200 million in conservation efforts to bolster Colorado River's Lake Mead, under 500+ plan*
2. Dec. 16 Nevada Independent: ["Sobering moment:" States sign cutback plan as Colorado River faces risks](#)
3. Dec. 29 Vail Daily: [Eagle County's snowpack starting to look more normal](#)
4. Jan. 5 Vail Daily: [Want to adopt a fire hydrant? It could save lives](#)
5. Jan. 7 AZ Daily Sun: *Phoenix among those voluntarily losing Colorado River water*
6. Jan. 7 NPR: [The Western megadrought is revealing America's 'lost national park'](#)
7. Jan. 7 US BOR: *Reclamation modifies monthly water releases from Lake Powell to protect reservoir's critical elevations*
8. Jan. 7 Salt Lake Tribune: [Feds tighten Colorado River flow at Glen Canyon Dam as ever-shrinking Lake Powell nears critical level](#)
9. Jan. 8 Vail Daily: [Vail looks to cut back on turf grass](#)
10. Jan. 15 Aspen Journalism: [Dropping reservoirs create 'green light' for sustainability on Colorado River](#)
11. Jan. 17 Vail Daily: [When does Vail get the most snowfall?](#)
12. Jan. 19 Vail Daily: [Remediation work of Trestle Area at Bolts Lake completed](#)



PRESS RELEASE

Water agencies announce partnership to invest \$200 million in conservation efforts to bolster Colorado River's Lake Mead, under 500+ plan

Las Vegas, Nevada (December 15, 2021) – Water agencies across Arizona, California and Nevada, together with the Department of the Interior, today announced a historic effort to invest up to \$200 million in projects over the next two years to keep the Colorado River's largest reservoir, Lake Mead, from dropping to critically low levels.

The agreement, known as the 500+ Plan, aims to add 500,000 acre-feet of additional water to Lake Mead in both 2022 and 2023 by facilitating actions to conserve water across the Lower Colorado River Basin. The additional water – enough water to serve about 1.5 million households a year – would add about 16 feet total to the reservoir's level, which continues to reach record low levels.

"Two decades of drought on the Colorado River is taking a toll across the Basin and on Lake Mead. By working together we've staved off these historic low levels for years, thanks to collaboration and conservation in the Lower Basin. But we need even more action, and we need it now," said Commissioner Camille Calimlim Touton of the U.S. Bureau of Reclamation.

In addition to Reclamation, the 500+ Plan includes the Arizona Department of Water Resources, Central Arizona Project, The Metropolitan Water District of Southern California, and the Southern Nevada Water Authority.

Under the Memorandum of Understanding signed today during the Colorado River Water Users Association's annual conference, ADWR commits up to \$40 million to the initiative over two years, with CAP, Metropolitan and SNWA each contributing up to \$20 million. The federal government plans to match those commitments, for a total funding pool of \$200 million.

Some of the specific conservation actions and programs that will be implemented through the 500+ Plan have already begun, while others are still being identified. The MOU includes conservation efforts in both urban and agricultural communities, such as funding crop fallowing on farms to save water, including the recent approval of a short-term agricultural land fallowing program in California, or urban conservation to reduce diversions from Lake Mead.

In 2019, Arizona, Nevada and California signed the Lower Basin Drought Contingency Plan and agreed to contribute water to Lake Mead as it reached certain levels, to keep it from dropping even further and reaching critically low levels. The DCP also included a provision that if modeling indicates a possibility of the reservoir reaching an elevation of 1,030 feet, action would be required.

“Our work on the 2019 DCP took more than five years to complete. This commitment to work together to stabilize Lake Mead came together in a matter of a few months,” said Arizona Department of Water Resources Director Tom Buschatzke. *“That alone is a powerful testament to the commitment of the Lower Basin States to work together with our partners at Reclamation to protect this vital river system.”*

“These past months have presented tremendous challenges with the additional pressure of the need to work quickly. But rather than drive us apart, this difficult situation has further strengthened our relationships. It’s amazing that work of this magnitude, sensitivity and expense could come together in this amount of time,” said Central Arizona Project General Manager Ted Cooke.

“We had hoped the contributions made under the DCP would be enough to stabilize Lake Mead while we seek longer-term solutions to the challenges on the Colorado River. But they aren’t, which is why we are moving forward with the 500+ Plan,” said Metropolitan General Manager Adel Hagekhalil.

“It is imperative that all users on the Colorado River take action now to preserve this critical resource that we all depend upon,” said SNWA General Manager John Entsminger. *“We hope as this initiative is developed, that along with our other many conservation efforts, it will provide strong support for Lake Mead water levels.”*

The plan marks the latest collaborative effort by the Lower Basin states in partnership with Reclamation to bring sustainability to the Colorado River, which has been in a historic drought since 2000.

The plan also highlights the Bipartisan Infrastructure Law’s historic \$8.3 billion investment in water infrastructure and will help minimize the impacts of drought, and develop a long-term plan to facilitate conservation and economic growth. The BID’s investments will fund water efficiency and recycling programs, rural water projects, WaterSMART grants and dam safety to ensure that irrigators, Tribes and adjoining communities receive adequate assistance and support.

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Phoenix among those voluntarily losing Colorado River water

 azdailysun.com/news/local/state-and-regional/phoenix-among-those-voluntarily-losing-colorado-river-water/article_003973f4-d7da-5959-ae10-cb853e6dfcd7.html

By FELICIA FONSECA Associated Press

January 7, 2022



By FELICIA FONSECA Associated Press

FLAGSTAFF — The City of Phoenix this week outlined how it will voluntarily contribute water to a regional plan to shore up the country's largest reservoir that delivers Colorado River water to three states and Mexico.

The river cannot provide seven Western states the water they were promised a century ago because of less snow, warmer temperatures and water lost to evaporation. Water managers repeatedly have had to pivot to develop plans to sustain it for the long-term.

Phoenix, the nation's fifth-largest city, is among entities in the river's lower basin that are part of the "500+ Plan" meant to delay further mandatory shortages. All pieces of the plan haven't been finalized, but farmers and Native American tribes are expected to play a big role.

The Colorado River serves more than 40 million people in Arizona, Nevada, New Mexico, Colorado, California, Wyoming, Utah and Mexico. Lake Mead and Lake Powell store the water and are used to gauge the river's health.

The 500+ Plan will be implemented as Arizona, Nevada and Mexico take the first-ever mandatory cuts from the Colorado River and while water users decide what to do after current rules for managing the river expire in 2026.

Here is a look at the plan:

What is the 500+ Plan?

The plan announced in December requires states in the lower Colorado River basin — Arizona, Nevada and California — plus the U.S. Bureau of Reclamation to reduce water use by at least 500,000 acre feet in 2022 and again in 2023.

The plan is projected to boost the water level of Lake Mead, which has hit record lows, by about 16 feet. The reservoir straddles the Nevada-Arizona border.

Water managers want to keep it from falling to 1,020 feet above sea level. That's the point at which they believe that the reservoir, with just one more dry year, could hit 950 feet and no longer have the capacity to deliver water to Arizona, California and Mexico.

Nevada has an extra layer of water security with a pipeline it built years ago to draw water below that level.

Water users crafted the 500+ Plan within months to create more certainty in the Colorado River supply.

Who is contributing water?

The plan anticipates Arizona contributing 223,000 acre feet and California 215,000 acre feet. An acre-foot of water is enough to serve 2-3 households annually.

In Arizona, Phoenix and the neighboring cities of Glendale, Scottsdale and Tempe, irrigation districts, water agencies, state entities and others have said they'll chip in.

The Metropolitan Water District in California will work through existing partnerships with irrigation districts and seek new ways to conserve water, said Colorado River resources manager Bill Hasencamp.

The district recently signed an agreement with the Quechan Tribe along the Arizona-California to pay farmers and the tribe not to plant crops in the hotter months when water use is highest. That could leave 6,000 acre feet of water in Lake Mead a year for two years, Hasencamp said.

“Yeah, it's a small piece but an important piece of this plan that's needed to make the Colorado River sustainable,” Hasencamp said.

Nevada will contribute money because it doesn't have water to give, said Southern Nevada Water Authority spokesman Bronson Mack. The Colorado River supplies southern Nevada with 90% of its water.

“We're already pretty tight as it is with 300,000 acre feet,” Mack said.

The Bureau of Reclamation is expected to contribute about 62,000 acre feet.

Native American tribes will be the biggest players in the plan because they tend to have larger and more secure rights to water that isn't fully being used. The Gila River Indian Community and the Colorado River Indian Tribes have signed on to the 500+ Plan.

“We see this as a win-win for everybody because we have solutions, we can offer solutions, we can offer ways to save the river,” said Colorado River Indian Tribes Chairwoman Amelia Flores. “I'm glad that others are looking at tribes in that way, that we can be an asset and not calling on us at the last minute.”

Who is funding the plan?

The states are required to put up \$100 million, and the federal government will match that amount for a total of \$200 million.

Phoenix will receive nearly \$4.2 million for the 15,977 acre feet it is contributing, which works out to \$260 an acre foot. The city will leave that water in Lake Mead rather than store it underground near Tucson as it had planned, said Cynthia Campbell, the city's water resource management adviser.

Phoenix will use the money for rebate programs for residents to switch to low-flow toilets, smart irrigation control systems and improving the efficiency of cooling towers, Campbell said.

The Metropolitan Water District will pay up to \$1.6 million to farmers on the Fort Yuma reservation and the Quechan Tribe to leave fields dry.

The tribe's water counsel, Jay Weiner, said the tribe is gauging interest among farmers.

"It's really a piece of Quechan trying to be as entrepreneurial as possible, figuring out ways that it can continue to benefit from its water rights for the good of the tribe and its members," he said.

What happens next?

Arizona, Nevada and Mexico will lose water this year in the first federally declared water shortage. In Arizona, that reduction largely falls on farmers in Pinal County who are planning to cut the acreage they farm and rely more on groundwater wells.

The Colorado River basin states will start negotiating soon on a new set of guidelines to replace the current ones that expire in 2026.

Lake Mead and Lake Powell upstream on the Arizona-Utah border haven't been full in more than 20 years. As they fall, it impacts water deliveries, hydropower and recreation at the popular tourist spots.

Lake Mead was at 1,066 feet this week, or about 34% full. Lake Powell was at 3,536 feet, or 27% full.

News & Multimedia

 usbr.gov/newsroom

Reclamation modifies monthly water releases from Lake Powell to protect reservoir's critical elevations

Media Contact: Upper Colorado Basin Public Affairs 801-524-3659 ucbpao@usbr.gov

For Release: Jan 7, 2022

Scenic view of Wahweap at
Lake Powell



SALT LAKE CITY – The Bureau of Reclamation began monthly operational adjustments at Glen Canyon Dam on Jan. 1, taking initial steps to protect the reservoir's target elevation of 3,525 feet. As of Jan. 5, Lake Powell's water surface elevation measured 3,536 feet, just 11 feet above the target elevation. Without the changes to monthly water releases, the reservoir's elevation was projected to steadily decline below the target elevation through the winter months. The adjusted releases are designed to help protect critical elevations at Lake Powell until spring runoff materializes.

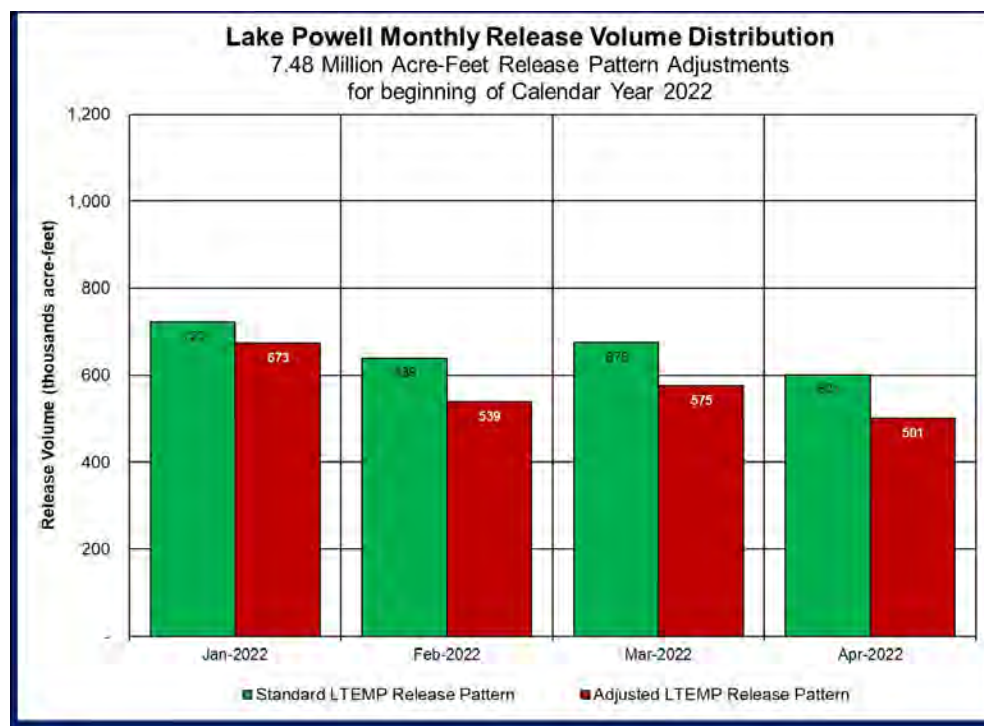
The monthly volume of water released from Glen Canyon Dam is being adjusted to hold back 350 thousand acre-feet (kaf) of water in Lake Powell from January to April when inflow to the reservoir is low. The same amount of water (350 kaf) will then be released to Lake Mead between June and September after the spring runoff occurs. The annual volume of water released from Glen Canyon Dam is unchanged by these operational adjustments.

"Under the Drought Response Operations Agreement, making these monthly operational adjustments at Glen Canyon Dam is essential to protect Lake Powell from dropping to critically low elevation levels in the weeks and months ahead," said **Reclamation's Upper Colorado Basin Regional Director Wayne Pullan**. "Although the basin had substantial snowstorms in December, we don't know what lies ahead and must do all we can now to protect Lake Powell's elevation."

The modified release pattern was put into action after Reclamation met with basin partners including the basin states, Tribes, federal agencies, non-governmental organizations and water managers to discuss the purpose and need to shift the delivery schedule of water.

Water year 2022 got off to a promising start in the Colorado River Basin with a wetter-than-normal October, but it was followed by the second-driest November on record and resulted in a loss of 1.5 million acre-feet of inflow for Lake Powell compared to the previous month's projections. December projections showed the reservoir dropping below the target elevation of 3,525 feet as early as February 2022. As defined in the Drought Response Operations Agreement, the target elevation provides a sufficient buffer to allow for response actions to prevent Lake Powell from dropping below the minimum power pool elevation of 3,490 feet, the lowest elevation that Glen Canyon Dam can generate hydropower.

While the basin recently experienced substantial snowpack, critically low reservoir levels coupled with uncertainty about future snowpack and observed spring inflow necessitate action. The modified release pattern for Glen Canyon Dam is as follows:



Reclamation is closely monitoring the basin's hydrology and will release updated projections later this month. The modified release pattern may be further adjusted, if needed, in response to changing hydrologic conditions. The operational adjustments are consistent with the dam's Long-term Experimental and Management Plan Record of Decision (LTEMP ROD) and will not impact operating tiers or annual release volumes at Lake Powell or Lake Mead. Only the monthly volumes are being adjusted; the annual release volume of 7.48 million acre-feet for water year 2022 (October 1, 2021 – September 30, 2022) will remain the same.

If future projections indicate the monthly adjustments are insufficient to protect Lake Powell's elevation, Reclamation will again consider additional water releases from the Colorado River Storage Project initial units of Flaming Gorge, Blue Mesa and Navajo reservoirs. Meanwhile, Reclamation and

the Upper Basin states continue to work on a Drought Response Operations Plan and expect to have it completed in April 2022.

“The plans adopted in previous years, including the 2007 Interim Guidelines and the Drought Contingency and Binational Water Scarcity Contingency plans, along with voluntary actions, have helped sustain the Colorado River System through the current 22-year-long drought,” said **Reclamation’s Lower Colorado Basin Regional Director Jaci Gould**. “We’ll continue to work with our basin partners in the future in the same collaborative spirit we have demonstrated in the past.”

The recently enacted Bipartisan Infrastructure Law provides the resources to back up Reclamation’s commitment to collaboration, with historic investments in water and drought resilience. Reclamation is working with its partners in the West in the transparent implementation of this law to meet the need for long-term adaptation for drought and a changing climate. For more information on the Infrastructure Law and Reclamation’s implementation, please visit our website at usbr.gov/BIL.

[December 24-Month Study Projections](#)
[Bipartisan Infrastructure Law Investments](#)