



**UPPER EAGLE REGIONAL  
WATER AUTHORITY**

**M E M O R A N D U M**

**TO:** Board of Directors  
**FROM:** Brian Thompson, Government Affairs Administrator  
**DATE:** November 10, 2022  
**RE:** November 17, 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, November 17, 2022  
8:30 a.m.**

**This meeting will be held in-person**

Walter Kirch Room  
Eagle River Water & Sanitation District Vail office  
846 Forest Road  
Vail, Colorado

The meeting can also be accessed on Microsoft Teams. Login information can be requested by sending an email at least 24 hours in advance to [info@erwsd.org](mailto:info@erwsd.org). In-person attendance is subject to COVID-19 protocols.

Input from members of the public is welcomed during the meeting's designated Public Comment and Public Hearing periods, consistent with §18-9-108, C.R.S. Speakers may address the Board on a first-recognized basis by the Chair. Public Comments are limited to three minutes per speaker on relevant matters not listed on the agenda.



**UPPER EAGLE REGIONAL  
WATER AUTHORITY**

**BOARD OF DIRECTORS REGULAR MEETING  
November 17, 2022  
8:30 a.m.  
Walter Kirch Conference Room**

**GOVERNED BY:**

The Metropolitan  
Districts of:

Arrowhead

Beaver Creek

Berry Creek

EagleVail

Edwards

The Town of Avon

**AGENDA**

	<b><u>Attachment Link</u></b>
<b>1. Introductions</b>	
<b>2. Public Comment</b>	
<b>3. Public Hearing Concerning FY 2023 Budget – Jim Cannava &amp; David Norris</b>	
3.1. Resolution to Adopt 2023 Budget	<a href="#">Action Item</a>
3.2. Resolution to Appropriate Sums of Money	<a href="#">Action Item</a>
<b>4. Public Hearing Concerning FY 2023 Proposed Rates – Jim Cannava &amp; David Norris</b>	
4.1. Resolution to Adopt 2023 Proposed Rates	<a href="#">Action Item</a>
<b>5. Action Items</b>	
5.1. Approval of minutes from the October 27, 2022, Regular Meeting	<a href="#">Action Item</a>
5.2. Consideration of 2023 Operations Agreement with ERWSD – Jim Cannava	<a href="#">Action Item</a>
5.3. Consideration of amended water dedication policy – Kristin Moseley	<a href="#">Action Item</a>
<b>6. Information Reports</b>	
6.1. Development Report	<a href="#">Informational</a>
6.2. Board committees	<a href="#">Informational</a>
6.3. October meeting summary – draft	<a href="#">Informational</a>
<b>7. Strategy Items</b>	
7.1. Board member input	
<b>8. General Manager Report – Linn Brooks</b>	
8.1. GM information items	
8.2. Business Administration report – David Norris	
8.3. Operations report – Siri Roman	<a href="#">Informational</a>
8.3.1. Radio Telemetry Units (RTU) System Upgrades	
8.4. Engineering and Water Resources report – Jason Cowles	<a href="#">Informational</a>
8.5. Communications and Public Affairs report – Diane Johnson	<a href="#">Informational</a>

**9. Water Counsel Report – Kristin Moseley**

**10. General Counsel Report – Kathryn Winn**

Confidential

**11. Executive Session**

- 11.1.** Motion to move into Executive Session pursuant to §24-6-402(4)(b) and (e), C.R.S, to receive legal advice and discuss matters in negotiation related to bulk water service

Confidential

**12. Any Action as a Result of Executive Session**

**13. Adjournment**



**UPPER EAGLE REGIONAL  
WATER AUTHORITY**

**BOARD ACTION REQUEST**

**GOVERNED BY:**

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

The Town of Avon

**TO:** Board of Directors  
**FROM:** David Norris, Director of Business Administration  
**DATE:** November 17, 2022  
**RE:** Resolution to Adopt 2023 Budget, Appropriate Sums of Money,  
and Certify the Budget.

**Summary of Subject:** Staff is recommending that the Board adopt the proposed 2023 budget, appropriate sums of money, and certify the budget.

**Discussion and Background:** The Authority legally noticed the November 17 board meeting for the public hearing to consider the 2023 proposed rates and fees. The District staff has met with the Authority Budget Subcommittee, including members George Gregory and Geoff Dreyer, to discuss the rates and fees proposal. A copy of the proposed 2023 budget was delivered to the full Board on October 14 and a revised budget was included in the October Board packets.

Attached are the full resolutions to:

- Adopt the 2023 budget
- Appropriate sums of money
- Certification of the 2023 Budget

**Legal Issues:** The Board is legally required to deliver a full budget to the State no later than January 31 of 2023.

**Budget Implication:** This will provide the full budget for the Authority's operations and capital spending in fiscal year 2023.

**Recommendation:** Staff recommends the Board approve the attached resolutions for the proposed 2023 budget.

**Board Actions Requested:**

1. Open the public budget hearing
2. Consideration of the Resolution and Motion
  - a. **Motion to adopt the attached resolutions for the purpose of adopting the proposed 2023 budget as presented, appropriate necessary sums of money, and certify the budget.**
3. Close the public meeting

**Attachments:**

Resolutions to Adopt 2023 budget and Appropriate sums of money, Certification of budget, Proposed FY 2023 budget



# UPPER EAGLE REGIONAL WATER AUTHORITY

## RESOLUTION TO ADOPT 2023 BUDGET

WHEREAS, the Board of Directors of the Upper Eagle Regional Water Authority (“Authority”) has appointed a budget committee to prepare and submit a proposed 2023 budget to the Board at the proper time; and

WHEREAS, the Board acknowledges the adoption of Amendment No. 1 on November 3, 1992, and expresses its intent to comply with the Amendment, although ambiguities exist in interpreting its provisions; and in the Authority’s pursuit of compliance with Amendment No. 1, a Reserve Fund has been established to hold fund balances, emergency reserves, and future monies expended into reserves; and

WHEREAS, an Enterprise Fund has been established in accordance with Amendment No. 1, in order to account for the enterprise operations of the Authority as determined by the Board of Directors in accordance with Amendment No. 1; and

WHEREAS, the spending and revenue limits of the Authority, based upon inflation and growth, as defined in Amendment No. 1, have been calculated, although actual valuation figures are not available from the County Assessor, and the best possible data has been utilized in substitution; and

WHEREAS, upon due and proper notice, published or posted in accordance with the law, said proposed budget was open for inspection by the public at a designated place, and a public hearing was held on November 17, 2022 and interested members of the public were given the opportunity to file or register any objections to said proposed budget; and

WHEREAS, whatever increases may have been made in the expenditures, like increases were added to the revenues so that the budget remains in balance, as required by law;

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

1. That estimated expenditures for each fund are as follows:

<b>Enterprise Fund:</b>	<b>\$24,711,228</b>
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2. That estimated revenues for each fund are as follows:

From unappropriated surpluses:	\$355,543
From Bond Proceeds	\$8,103,333
From sources other than general property tax:	\$17,315,088
<b>Total Revenues:</b>	<b>\$25,773,964</b>

3. That the budget, as submitted, amended, and herein summarized by fund, be, and the same hereby is, approved and adopted as the budget of the Upper Eagle Regional Water Authority for the 2023 fiscal year.
4. That the budget, as hereby approved and adopted, shall be certified by the Treasurer and/or President of the Authority to all appropriate agencies and is made a part of the public records of the Authority.

Adopted this 17<sup>th</sup> day of November, 2022

(seal)

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George Gregory – President

## **RESOLUTION TO APPROPRIATE SUMS OF MONEY**

WHEREAS, the Board of Directors of the Upper Eagle Regional Water Authority has adopted the 2023 annual budget in accordance with the Local Government budget laws on November 17, 2022; and

WHEREAS, the Board acknowledges the adoption of Amendment No. 1 on November 3, 1992, and expresses its intent to comply with the Amendment, although ambiguities exist in interpreting its provisions; and in the Authority's pursuit of compliance with Amendment No. 1, a Reserve Fund has been established to hold fund balances, emergency reserves, and future monies expended into reserves; and

WHEREAS, an Enterprise Fund has been established in accordance with Amendment No. 1, in order to account for the enterprise operations of the Authority as determined by the Board of Directors in accordance with Amendment No. 1; and

WHEREAS, the spending and revenue limits of the Authority, based upon inflation and growth, as defined in Amendment No. 1, have been calculated, although actual valuation figures are not available from the County Assessor, and the best possible data had been utilized in substitution; and

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

WHEREAS, it is not only required by law, but also necessary to appropriate the revenues provided in the budget to and for the purposes described below, as more fully set forth in the budget, including any interfund transfers listed therein, so as not to impair the operations of the Authority.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors for the Upper Eagle Regional Water Authority that the following sums are hereby appropriated from the revenues of each fund, to each fund, for the purposes stated:

**Total Appropriation:**

**\$24,711,228**

Adopted this 17<sup>th</sup> day of November, 2022.

(seal)

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George Gregory - President

## **CERTIFICATION OF BUDGET**

TO: THE DIVISION OF LOCAL GOVERNMENT

This is to certify that the budget, attached hereto, is a true and accurate copy of the budget for Upper Eagle Regional Water Authority, for the budget year ending December 31, 2023, as adopted on November 17<sup>th</sup>, 2022.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Upper Eagle Regional Water Authority in Eagle County, Colorado, this 17<sup>th</sup> day of November, 2022.

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George Gregory – President

(seal)



**UPPER EAGLE REGIONAL  
WATER AUTHORITY**

**M E M O R A N D U M**

**TO:** Board Budget Subcommittee  
**FROM:** David Norris, Director of Business Administration  
**DATE:** October 18, 2022  
**RE:** Proposed 2023 Budget

**GOVERNED BY:**

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

The Town of Avon

## Introduction

An effective and efficient budget proposal is one that is a team effort and a cross-collaboration from all department managers and staff. This budget season, we continued the hybrid approach of zero-based budgeting and looking at revenue first. Using a collaborative effort of a cross-departmental team to aide in developing the proposed 2023 District and Authority budgets, the attached draft budget packet includes the staff recommended budgets for 2023.

The budget schedule is largely driven by statutory requirements. Critical dates are:

- Oct 15: Draft Budget must be submitted to each Board (Section 29-1-105, CRS)
- Dec. 15: Adopt Budget and appropriate moneys, if certifying a mill levy (Section 29-1-108 (2), CRS)

Below is a summary of the proposed 2023 budget. Each topic was discussed in more detail at the first budget subcommittee meeting.

### *Proposed 2023 Budget Summary*

Total Budget Comparison	Amount	\$ Change	% Change
2022 Revised Budget	32,873,089		
2022 Projection	25,558,564	(7,314,524)	-22.3%
<b>2023 Proposed Budget</b>	<b>21,807,352</b>	<b>(11,065,736)</b>	<b>-33.7%</b>
2022 Projected Carryforward	2,903,876		
<b>2023 Total Appropriated Funds</b>	<b>24,711,228</b>	<b>(8,161,860)</b>	<b>-24.8%</b>

- Operating increase 16% over 2022 projection, 2.9% over 2022 revised budget
- Capital increase 27% over 2022 projection, 4% decrease from 2022 revised budget
- Bond decrease 52% from 2022 projection, 67% decrease from 2022 revised budget

### Net Income Summary

The proposed 2023 budgeted net income is \$1,062,736 to account for an added \$1 million to build the fund balance to reduce the reliance on Bond funding for future projects. The 2023 proposed CRP rates bring CRP expenses in balance. The positive Operating net income offsets the Capital deficit.

### 2023 Proposed Net Income Summary

Type	Revenue	Expense	Net
Operating	13,143,878	11,089,457	2,054,421
Debt Service	2,646,362	2,646,362	0
CRP	986,686	980,000	6,686
Capital	538,162	1,536,533	(998,371)
<b>Subtotal</b>	<b>17,315,088</b>	<b>15,752,352</b>	<b>1,062,736</b>
Bond Projects		5,555,000	
<b>Total</b>		<b>21,807,352</b>	

### Proposed 2023 Water Rate Summary

Water Service Base Charge/SFE/Month				
	2022	2023	\$ Change	% Increase
Base Rate	\$21.39	\$23.53	\$2.14	10%
Debt Service 2020 Rev	\$5.90	\$6.75	\$0.85	14%
Debt Service 2020 Ref	\$2.80	\$2.80	\$0.00	0%
Debt Service 2013A Bonds	\$3.28	\$3.34	\$0.06	2%
Capital Replacement Program	\$3.96	\$4.75	\$0.79	20%
<b>Base Portion of Bill per SFE</b>	<b>\$37.33</b>	<b>\$41.17</b>	<b>\$3.84</b>	<b>10%</b>

Water Usage Rates (per kgal)	2022	2023	\$ Change	% Change
<i>Note: 6 kgal per tier</i>				
Tier 1 (0-6,000 gallons)	\$4.48	\$4.75	\$0.27	6%
Tier 2 (6,001-12,000 gallons)	\$6.72	\$7.39	\$0.67	10%
Tier 3 (12,001-18,000 gallons)	\$11.72	\$12.89	\$1.17	10%
Tier 4 (18,001-24,000 gallons)	\$22.02	\$26.86	\$4.84	22%
Tier 5 (Greater than 24,000 gallons)	\$33.03	\$40.30	\$7.27	22%

Typical customer pays	2022	2023	Increase	% Increase
Base Fees & 6 kgal use	\$64.21	\$69.67	\$5.46	8.5%

*Proposed 2023 Wastewater Rate Summary*

<b>Wastewater Service Base Charge/SFE/Month (\$6.48 per kgal to \$7.13 per kgal)</b>				
	2022	2023	\$ Change	% Increase
Base Service (min charge 5 kgal)	\$32.40	\$35.64	\$3.24	10%
Debt Service 2017 Bonds	\$2.77	\$2.77	\$0.00	
Debt Service 2020A Bonds	\$5.15	\$5.15	\$0.00	
Debt Service 2020B Bonds	\$2.74	\$2.74	\$0.00	
Capital Replacement Program	\$2.95	\$5.31	\$2.36	80%
<b>Base Portion of Bill per SFE/Month</b>	<b>\$46.01</b>	<b>\$51.61</b>	<b>\$5.60</b>	<b>12%</b>

*Proposed 2023 Combined Wastewater & Water Rate Summary*

<b>Combined Water and Wastewater</b>				
Typical customer pays per FE/Month:	2022	2023	\$ Increase	% Increase
<b>UERWA Customer</b>	<b>\$110.22</b>	<b>\$121.28</b>	<b>\$11.06</b>	<b>10%</b>

*Proposed 2023 Wastewater & Water Impact Fees*

Upper Eagle Regional Water Authority													
DISTRICTS	RESIDENTIAL					COMMERCIAL - Based on Meter Size							
	Residential Base	Up to X Sq Ft	Thereafter per Sq Ft	Efficiency Unit (0.5 SFE)	Accomm Unit (0.35 SFE)	Swimming Pools per Sq Ft	¾" 1.5 SFE	1" 2.6 SFE	1½" 5.8 SFE	2" 10.3 SFE	3" 23.0 SFE	4" 40.9 SFE	6" 92.1 SFE
UERWA WSIF (Water System Impact Fee)	Floor AreaTiers	Sq Ft in TIER	Price per Sq Ft	TIER TOTAL									
	TIER 1	0 - 2,500	\$5.96	\$14,899									
	TIER 2	2,501 - 3,500	\$7.46	\$7,455									
	TIER 3	3,501 - 5,000	\$9.31	\$13,970			\$20,426	\$35,406	\$78,982	\$140,262	\$313,206	\$556,961	\$1,254,185
	TIER 4	5,001 +	\$11.65	+ overage									
If connecting to the Wastewater System the following Impact Fee assessment shall apply:													
ERWSD- Wastewater	0	N/A	\$5.08			\$2.20	\$17,419	\$30,192	\$67,352	\$119,607	\$267,085	\$474,946	\$1,069,499
The following Other Impact Fee assessments may also apply:													
UERWA-Irrigation Water Impact Fee	\$1.42 per sq. ft. of irrigation					Applies to new open areas, new parks and commercial irrigated areas							
West Edwards Sewer Encumbrance Fee	\$1.100 per SFE					\$1.100 per SFE							

<b>2023 Inclusion, &amp; Dedication FEES</b>		
<b>Eagle River Water &amp; Sanitation District</b>	<b>Upper Eagle Regional Water Authority</b>	
<b>DEVELOPMENT FEE/ DEDICATION/ DEPOSIT</b>	<b>RESIDENTIAL</b>	<b>COMMERCIAL</b>
<b>Inclusion Fee</b>	\$1,100.00	
<b>Treated Water Storage Dedication (New Tank)</b>	Where no existing regional water storage is sufficient to serve the proposed development, an applicant will be required to construct and dedicate water storage sufficient to serve the needs of the development. See Treated Water Storage Dedication policy.	
<b>Water Rights Dedication Review Deposit</b>	\$1,650.00	
<b>Water Rights Dedication Cash-in-lieu</b>	\$66,063 per consumptive acre-foot of water*	

\*Details to be discussed during work session.

### *Fund Balance Summary*

Authority	Fund Balance
Beginning Balance	1,772,439
2022 Projection	2,190,984
2023 Projected Beginning Balance	3,963,423
2022 Carry Forward	(355,543)
2023 Contribution	1,062,736
<b>2023 Projected End Balance</b>	<b>4,670,616</b>

## Budget Overview

### 2022 Operational Expense Budget Forecast

The 2022 operating budget was \$10,781,061; the 2022 projected operating expenditures are \$9,566,761, for a positive expense variance (actual spending less than budget) of \$1,214,300, or 11.3% lower than budget. Notable decreased costs included delays on meter purchases and other supply chain ordering issues.

Note: Total expenditures include operations, outsourced services, operating agreement, and *exclude* any expenditures related to debt service or debt issuance as those are typically capitalized and represented in our capital budgets

### 2023 Operational Expense Budget Summary

The 2023 operating budget decision item narratives describing each request are included as an attachment to this memorandum. The proposed 2023 operating budget is \$11,089,457, an increase of \$308,396 or +2.9% from the 2022 budget. As displayed below, the proposed 2023 budget by department, as it relates to 2022 budget, articulates the differences year over year.

Department	2022 Budget	2022 Projection	2023 Budget	YoY Budget Var	% Change
Administration & Community Relations	125,800	48,469	106,800	(19,000)	-15%



Engineering	754,515	620,636	754,806	291	0%
Field Ops	745,000	528,832	730,000	(15,000)	-2%
Finance	6,691,731	6,721,015	7,374,77	683,046	10%
Ops Tech	100,000	57,578	85,000	(15,000)	-15%
Utility Services	1,000,000	319,248	600,000	(400,000)	-40%
Water	1,364,015	1,270,983	1,438,074	74,059	5%
<b>Total</b>	<b>10,781,061</b>	<b>9,566,761</b>	<b>11,089,457</b>	<b>308,396</b>	<b>2.9%</b>

Below are notable changes from the original 2022 operating budget to the proposed 2023 Operating Budget, including the decision items and excluding debt. Departments not included in the list below projected minimal increases/decreases.

#### Administration and Community Relations

- Reduced General Operations line to reflect past year actual spends.

#### Engineering

- Reduced Water Rights Protection line from previous years due to Bolts Lake bonded legal fees versus operating in past years.

#### Ops Tech

- Repairs on Authority systems and snow removal lines were lower comparative to past years spending.

#### Utility Services

- Supply chain delays on meter purchases

#### Finance

- Increase to Operating Agreement with the District.

### Overall Payroll, and Benefits

The total number of full-time employees for 2023 is proposed to increase by 2, to 133 full time positions. Budget impacts to FTE increases are \$212,487. While 2 additional FTE are being requested this budgets cycle, there were needs equating to 12 overall FTE for the coming year. With a collaborative effort among the departments, the strategy was developed to concentrate on compensations and analysis study alignments and reduce the requests to allow for this opportunity.

- IT – Network Administrator
- Field Ops – Field Operator
- 2% Merit Increase
- 1% Cost of Living Adjustment

Request	FTE	Operating	Capital	Total
IT – Network Administrator	1.00	\$137,030	\$4,050	\$141,080
Field Ops – Field Operator	1.00	\$67,857	\$3,550	\$71,407
Merit Increase		\$241,835		\$241,835
Cost of Living Adjustment		\$119,720		\$119,720
<b>Total</b>	<b>2.00</b>	<b>\$566,442</b>	<b>\$7,600</b>	<b>\$574,042</b>

The proposed budget includes a 2% merit and 1% a cost-of-living adjustment (COLA) as approved by the District, at the September Board meeting. The combined increase is equal to \$361,555

Health and other benefit costs are projected to increase by 2.9%. It is proposed that the District shift the respective costs to the employee.

Total personnel costs (salaries and benefits) for 2023 are budgeted at \$17,151,877 an increase of \$1,784,078 from the 2022 projection, or 11.6%. Of this increase, \$566,442 is dedicated to FTE decision items, including new FTE and Merit/COLA packages.

## Capital Budget Overview

### Summary

The 10-year Capital Budget Spreadsheet for 2023 and decision item narratives describing each request are included as an attachment to this memorandum. The total proposed 2023 capital budget is \$7,671,533, including bonded projects. The totals include the following major capital projects:

Fund Type	Project Name	2023 Budget	Total Project Budget
Bond	Bolts Lake Reservoir	\$425,000	\$66,449,223
Bond	CRP- Wildridge BPS and PRV Improvements	\$2,880,000	\$5,000,000
Bond	CRP-Arrowhead Transmission Main Rehab	\$700,000	\$2,350,000
Bond	CRP-Upgrade PLC 6 @ ADWF-Master PLC	\$1,500,000	\$2,966,245
Capital	Water Treatment Master Plan	\$133,333	\$333,333

In addition to 2023 requests for funding, the proposed 2023 capital budget is also comprised of projected carryforwards and returned funds from 2022. While every effort is made to accurately forecast project timing, rollovers and returned funds occur for various reasons. The major

components are detailed below in Tables 1 and 2, respectively.

*Table 1: 2022 to 2023 Budget Carryforward Summary*

Fund Type	Department	Project Name	Estimated Carryforward	Description
Bond	Engineering	20-1-2-00-00-136 Bolts Lake Reservoir	297,229	Timing of invoices for major geotechnical investigation and water court
Capital	Engineering	20-1-2-00-00-994 Reservoir Storage Master Plan	13,699	Ongoing water rights billings
Bond	Field Ops	20-1-2-00-00-138 CRP-Arrowhead Transmission Main Rehab	1,301,104	Project delayed one year to investigate and design alternate alignment
Capital	Field Ops	20-1-2-00-20-100 Beaver Creek BPS3 Rehabilitation	56,400	Project held in order to combine all 3 Beaver Creek pump stations into one project
Bond	Ops	20-1-2-00-00-469 RTU System Upgrade	200,000	Project complete, remaining budget is for internal retrofit work
Bond	Water	20-1-2-00-00-039 CRP-Fenno Well House/Raw Wtr Conveyance	750,000	2022 Budget contemplated major work at well heads, 2022 work was investigation and easement acquisition
Capital	Water	20-1-2-00-00-135 Water System Emergency Power	147,587	Project dependent on Emergency Response Plan
Capital	Water	20-1-2-00-30-300 Cordillera East1 (Teacup) Tank Expansion	57,857	Project deferred to 2024/25 as control modifications addressed overflow issues
CRP	Water	20-1-2-00-00-044 CRP-ADWF Domestic Lift Station Rehabilitation	80,000	Project delayed due to vendor and supply issues

The total carryforward is estimated to be \$2,903,876, where \$355,543 come from operating revenues (fund balance) and \$2,548,333 coming from available bond balances.

*Table 2: 2022 Returned Funds Summary*

Fund Type	Project Name	Estimated Returned Funds	Description
Bond	20-1-2-00-00-028 Traer Creek Tank Replacement	1,318,352	Project substantially complete as of 9/30/22
Bond	20-1-2-00-00-039 CRP-Fenno Well House/Raw Wtr Conveyance	709,720	Scope of work reduced based on investigation work
Bond	20-1-2-00-00-469 RTU System Upgrade	1,077,090	Project complete and under budget
CRP	20-1-2-00-00-375 CRP-ADWF Plant Repairs	114,309	Additional 120k budgeted for roof replacement, only a small portion completed
CRP	20-1-2-00-00-376 CRP-EDWF Plant Repairs	25,000	Under budget
CRP	20-1-2-00-00-999 CRP-Distribution System Capital Replacement Prog.	149,275	Under budget
CRP	20-1-2-00-00-377 CRP-	22,842	Under budget

	Wells/Misc Repairs		
CRP	20-1-2-00-00-024 CRP-OT Network Upgrade/Improvements	20,000	Unused account cancelled and returned, replaced with OTS Inventory

The total returned funds are estimated to be \$3,436,588 comprised of \$3,105,162 from Bond projects, and \$331,426 from Capital and CRP.

### Debt Service

As stated in the 2022 budget memo, the 2020 Water Revenue Refunding and Improvement Bonds were refunded. Based on a projected three-year capital outlay, it is anticipated that an estimated \$15M revenue bond will need to be issued in Q2-Q3 2023.

UERWA	Bond Fund Balance
Beginning Balance	9,710,297
2022 Projection	(11,544,445)
2022 Projected Beginning Balance	(1,834,148)
2022 Carryforward	(2,548,333)
2023 Budget	(5,555,000)
2024 Budget	(2,555,000)
2025 Budget	(2,950,000)
<b>Bond Balance</b>	<b>(15,442,481)*</b>

\*Estimated total at this time, the projects will be drafted for review to the board prior to issuance on new bond proceeds.

### Upper Eagle Regional Water Authority Operations Agreement

The Authority has contracted with the District to operate and maintain the water treatment plants in Avon and Edwards, the Berry Creek and Cordillera wells, the water distribution system, and to provide support services including accounting and billing, customer service, engineering, and other administrative activities such as board support and staff management. The Operations Agreement covers time, administrative costs, and office equipment and supplies associated with supporting the Authority's operations.

The Authority is billed monthly by the District based on an annually budgeted amount, and then the accounts are reconciled for each preceding year once the respective costs are properly allocated to each entity. In 2022, the operations agreement was increased from \$4,700,000 to \$6,750,000. The projected need for 2023 is \$7,425,000. Listed below is an actual costing from 2013 through 2022 (projected). For many years this agreement has been negotiated at certain rates and budgets. At the end of the fiscal year, true ups commence, and the Authority pays what is needed. Within the total budget package, there is a \$7,425,000 operations agreement

request for 2023. This represents a 10% increase over 2022 to capture increases in personal services and materials.

Routine operations overhead include office and operations facilities, supplies and management overhead. Its components are generally split on payroll allocation percentage basis for the Authority and District, respectively. Personnel expenditures are based on the estimated costs for the District staff time spend on Authority operations.

For historical perspective, Table 3 below illustrates the actual costs related to the Operations Agreement since 2013.

Year	Total
2013	\$3,408,910
2014	\$3,345,025
2015	\$3,672,879
2016	\$3,614,276
2017	\$4,613,169
2018	\$4,561,104
2019	\$4,706,246
2020	\$5,726,773
2021	\$7,539,684
2022	\$6,750,000
2023	\$7,425,000

\*Increases in 2023 are primarily driven by increases in personnel services, information technology (IT) expenses.

### Consumer Price-Index

The official Consumer Price Index increase for all urban consumers in Denver-Aurora-Lakewood for December 2020 to December 2021 was 3.54%. The CPI increase from June 2021 to June 2022 (again, Denver-Aurora-Lakewood) was 8.2%. Currently, the CPI for all of 2022 is forecast to be 8.2% by the Office of State Planning and Budgeting and 7.9% by the Legislative Council.

## Decision Items

Department	Type	Description	Capital	Bond	2023 Amount	2024 Amount	2025 Amount
Water	Capital	ADWF Membrane Roof Replacement	400,000		400,000		
Field Ops	Bond Project	Consolidated BPS 1,2, & 3 upgrade (move funds from BPS 2 & 3)		250,000	250,000	981,000	
<b>Total</b>			<b>400,000</b>	<b>250,000</b>	<b>650,000</b>	<b>981,000</b>	<b>-</b>

### Decision Items Details

**Name of Request:** Beaver Creek BPS

**Department:** Field Operations

***Problem or Opportunity:***

Rehabilitation of pump station electrical and mechanical systems replaces assets before they fail, causing emergencies and potential water outages at the ski resort community at Beaver Creek.

The 2020 Distribution Master Plan included a detailed condition assessment and risk evaluation of all distribution system assets. In general, 40 plus year-old high elevation subdivision infrastructure was found to be at the end of its useful life. Beaver Creek 3 and 2 were both ranked 'extreme' risk. Individual projects were approved in 2020 for inclusion in the 10-year capital plan. Field Ops approached CIP asking why BPS1 was not a part of the scope – BPS1 was scored 3rd worse with a 'high' risk score.

***Consequences of Problem:***

Potential for failure of 'extreme' risk scored assets, emergency construction (especially in winter/ski season/irrigation season) could have environmental impacts.

***Proposed Solution:***

Project implements the findings of the Distribution Master Plan to reduce overall system risk, increasing reliability and redundancy. Consolidation of the three projects into one may benefit from increased economy of scale and better efficiency in design/permitting. Seasonal windows, aesthetics, and resort community location will provide unique challenges best suited to a cohesive approach system wide. PRV abandonment in other areas in Beaver Creek will be part of the scope of work, eliminating two assets and simplifying operations and removing two small pressure zones.

***Costs:***

**Source:** Bond

Costs	2023	2024
Design/Permitting	250,000	
Construction		2,500,000
<b>Totals:</b>	<b>250,000</b>	<b>2,500,000</b>

## Name of Request: ADWF Membrane Roof Replacement

Department: Water

### *Problem or Opportunity:*

The roof at ADWF is aging and needs to be replaced. A large portion of the roof is original to 1995 construction, the other portion is unknown. Roof leaks can cause moisture issues, mold, corrosion, damage sensitive equipment, and a roof leak above the process area could introduce rainwater directly into the treatment process. A portion of the roof was replaced in the rear of the building in 2022. The remainder of the roof was going to be included in the ADWF Administration Expansion project, but that project has been deferred several years; the roof continues to deteriorate and is leaking in multiple areas.

### *Consequences of Problem:*

Continued leaking could damage equipment, lead to mold, corrosion, and other moisture-related issues in a Water Treatment Facility. Deferral of roof project will result in continued deferral of rooftop solar panels. The building is in an advantageous location and utilized a considerable amount of electricity.

### *Proposed Solution:*

Replace aging and end of life infrastructure before it causes more costly damage and investment. New roof will permit installation of ballasted solar panels in sunny, south facing location to offset energy usage.

### *Costs:*

**Source: Capital**

Costs	2023
Membrane Roof Replacement	400,000
Totals:	400,000

## Proposed 2023 Budget Line Item Detail

Appendix A Attached

## 10 Year Capital Reference

Appendix B Attached





## Appendix A

Type	Department	Account	Sum of 2022 Budget	Sum of 2022 ending balance projection - 12/31/22	Sum of 2023 Budget		
Bond Project	Engineering	20-1-2-00-00-028 Traer Creek Tank Replacement	2,398,352	1,080,000	-		
		20-1-2-00-00-136 Bolts Lake Reservoir	6,333,685	6,036,456	425,000		
	Field Ops	20-1-2-00-00-014 CRP- Wildridge BPS and PRV Improvements	120,000	120,000	2,880,000		
		20-1-2-00-00-138 CRP-Arrowhead Transmission Main Rehab	1,617,104	316,000	700,000		
		20-1-2-00-00-499 Edwards Transmission Line Phase 2	1,094,559	1,094,559	-		
	Ops Tech	20-1-2-00-00-019 CRP-Upgrade PLC 6 @ ADFW-Master PLC	1,122,199	1,122,199	1,500,000		
		20-1-2-00-00-469 RTU System Upgrade	2,577,090	1,500,000	50,000		
	Water	20-1-2-00-00-039 CRP-Fenno Well House/Raw Wtr Conveyance	1,730,705	270,985	-		
		20-1-2-00-00-490 ADFW Administration Expansion	-	4,246	-		
Bond Project Total			16,993,694	11,544,445	5,555,000		
Capital	Engineering	20-1-2-00-00-994 Reservoir Storage Master Plan	100,000	86,301	25,000		
		20-1-2-00-00-398 Fire Flow Improvements (Share of AWWTF fireflow)	582,410	582,410	-		
	Field Ops	20-1-2-00-20-001 Dowd BPS Upgrades	-	-	-		
		20-1-2-00-20-100 Beaver Creek BPS3 Rehabilitation	76,400	20,000	-		
	Finance	20-1-2-00-00-900 CRP-Capitalized Construction Management	515,000	515,000	566,500		
		20-1-2-00-00-133 Water Treatment Master Plan	200,000	200,000	133,333		
	Water	20-1-2-00-00-135 Water System Emergency Power	147,587	-	50,000		
		20-1-2-00-00-333 Zeta Potential Analyzer for Coagulant System	-	-	-		
		20-1-2-00-30-001 Cordillera Autoflush Hydrants	-	-	-		
		20-1-2-00-30-300 Cordillera East1 (Teacup) Tank Expansion	57,858	1	76,200		
		20-1-2-00-30-301 - Cordillera West Tank 1 Rehabilitation	-	-	-		
		20-1-2-00-20-101 - Beaver Creek BPS 1,2, & 3 Rehabilitation	-	20,000	285,500		
		ADWF Membrane Roof Replacement	-	-	400,000		
		Capital Total			1,679,255	1,423,712	1,536,533
		CRP	Field Ops	20-1-2-00-00-244 CRP-Pump Station Industrial Painting	32,058	50,195	75,000
				20-1-2-00-00-999 CRP-Distribution System Capital Replacement Prog.	300,000	150,725	300,000
	Human Resources		20-1-2-00-00-325 CRP-Safety/Security	-	-	10,000	
			20-1-2-00-00-024 CRP-OT Network Upgrade/Improvements	20,000	-	5,000	
	Ops Tech		20-1-2-00-47-100 OTS Equipment Inventory	-	581	10,000	
20-1-2-00-00-043 CRP-Water Storage Tank Improvements			150,000	150,000	180,000		
Water	20-1-2-00-00-044 CRP-ADWF Domestic Lift Station Rehabilitation		80,000	-	-		
	20-1-2-00-00-260 CRP-UERWA Analyzer Replacement Allowance		30,000	51,805	100,000		
	20-1-2-00-00-375 CRP-ADWF Plant Repairs		220,000	105,691	100,000		
	20-1-2-00-00-376 CRP-EDWF Plant Repairs		50,000	25,000	100,000		
	20-1-2-00-00-377 CRP-Wells/Misc Repairs		50,000	27,158	100,000		
CRP Total			932,058	561,155	980,000		
Debt Service	Finance		20-1-5-00-00-067 C/P 2013A Water Bonds	150,000	150,000	165,000	
			20-1-5-00-00-068 C/P 2013C Water Bonds	105,000	105,000	105,000	
		20-1-5-00-00-069 C/P 2020 Revenue Bonds	-	-	150,000		
		20-1-5-00-00-087 C/P Eagle Park Loan	104,611	104,611	110,312		
		20-1-5-00-00-125 Interest Payable Eagle Park Loan	-	(23,530)	500		
		20-1-5-00-00-150 Interest Payable 2013A Bonds	-	(0)	(0)		
		20-1-5-00-00-151 Interest Payable 2013C Bonds	-	(0)	(0)		
		20-1-5-00-00-152 Interest Payable 2020 Revenue Refunding Bonds	-	0	0		
		20-1-5-00-00-153 Interest Payable 2020 Revenue Bonds	-	-	-		
		20-1-9-00-25-230 Bond Interest Expense	2,124,910	2,124,910	2,114,050		
		20-1-9-00-25-240 Paying Agent Fees	2,500	1,500	1,500		
		Debt Service Total			2,487,021	2,462,491	2,646,362
		Operating	Administration & Community Relations	20-1-9-00-15-460 Consumer Confidence Report	7,000	-	7,000
				20-1-9-00-25-016 General Operations	20,000	-	1,000
20-1-9-00-25-060 Communications	12,000			5,770	12,000		
20-1-9-00-25-080 Board Meetings/Travel Expenses	2,000			420	2,000		
20-1-9-00-25-090 Directors Fees	14,800			8,000	14,800		
20-1-9-00-25-190 General Legal	70,000			34,279	70,000		
Engineering	20-1-9-00-00-777 Water Demand Mgt Rebate Program		25,000	20,150	140,000		
	20-1-9-00-15-270 Gauging Station Maintenance		63,654	63,654	66,837		
	20-1-9-00-15-275 USGS Stream Gage Contracts		67,980	67,051	71,379		
	20-1-9-00-15-290 Green Mtn Augmentation - USDA D of I		11,227	-	11,788		
	20-1-9-00-15-296 RR Right of Way & Permits		2,000	1,990	2,000		
	20-1-9-00-15-320 Wolford Mt. Augmentation Water - CRWCD		227,154	203,251	213,413		
	20-1-9-00-15-330 Eagle Park Augmentation Water - CRWCD		25,000	27,039	28,390		
	20-1-9-00-25-018 Engineering-Planning Dept.		10,000	-	10,000		
	20-1-9-00-25-030 Water Rights Protection		250,000	178,000	150,000		
	20-1-9-00-25-150 Consulting - Water Budgeting		40,000	29,950	30,000		
Field Ops	20-1-9-00-25-297 Sustainability Committee		8,000	7,888	8,000		
	20-1-9-00-25-778 Water Demand Management		22,000	21,663	22,000		
	20-1-9-00-35-202 Easements and Recording Fees		2,500	-	1,000		
	20-1-9-00-15-515 FH Snow Removal		60,000	60,000	10,000		
	20-1-9-00-18-500 BPS/PRV Repairs - Equipment		110,000	78,783	110,000		
	20-1-9-00-18-510 BPS/PRV Building & Grounds		5,000	9,977	10,000		
	20-1-9-00-25-019 Engineering - FO		10,000	-	10,000		
	20-1-9-00-35-200 Electricity - lines,heat tape,PRV		10,000	10,000	10,000		
	20-1-9-00-35-201 UERWA System Electricity		300,000	300,000	330,000		
	20-1-9-00-35-500 Repair- Distribution System		250,000	70,072	250,000		
Finance	20-1-9-00-15-160 Eagle Park Reservoir Operating Assessments		238,661	238,661	262,527		
	20-1-9-00-25-020 Miscellaneous		6,000	6,313	13,000		
	20-1-9-00-25-110 Insurance Liability		127,070	140,912	145,000		
	20-1-9-00-25-160 Audit		25,000	25,000	25,750		
	20-1-9-00-25-180 Financial Consulting		10,000	25,129	20,000		
	20-1-9-00-25-185 Eagle River Watershed Support		25,000	25,000	25,000		
	20-1-9-00-25-300 ERWSD Admin. & Acct - Ops Agreement		6,235,000	6,235,000	6,858,500		
	20-1-9-00-25-420 Eagle River Watershed Study USGS		25,000	25,000	25,000		
	20-1-9-00-15-400 OTS Hardware & Equipment		65,000	20,062	45,000		
	20-1-9-00-15-408 MCC Maintenance & Cleaning		25,000	30,000	30,000		
Ops Tech	20-1-9-00-15-409 OTS Support Services		10,000	7,516	10,000		
	20-1-9-00-35-320 Meter Replacement/Equip Parts		1,000,000	319,248	600,000		
Utility Services	20-1-9-00-15-120 ADFW Chemicals - Treatment		265,000	291,500	306,075		
	20-1-9-00-15-200 UERWA Electricity		500,000	500,000	550,000		
	20-1-9-00-15-350 Natural Gas		15,000	33,794	37,173		
	20-1-9-00-15-411 UERWA Outside Lab Services		25,000	25,000	31,250		
	20-1-9-00-15-500 ADFW Repairs - Equipment		50,000	50,000	50,000		
	20-1-9-00-15-510 ADFW Repairs - Building/Grounds		75,000	25,000	35,000		
	20-1-9-00-15-570 ADFW Sewer		41,000	41,000	41,000		
	20-1-9-00-15-575 UERWA TOC Supplies		35,000	35,000	36,750		
	20-1-9-00-15-580 Licensing & State Fees		6,300	6,300	6,300		
	20-1-9-00-15-600 ADFW Chemicals-Lab Reagents		20,000	22,000	23,100		
Water	20-1-9-00-15-780 Water Tank Cleaning		30,000	23,680	25,000		
	20-1-9-00-15-781 Water Tanks Maintenance & Repairs		50,000	50,000	50,000		
	20-1-9-00-15-790 Diversion Intake-Cleaning Maintenance		5,000	-	5,000		
	20-1-9-00-16-110 EDWF Chemicals - Lab		5,000	5,500	5,775		
	20-1-9-00-16-120 EDWF Chemicals - Treatment		45,000	49,500	51,975		
	20-1-9-00-16-500 EDWF Repairs - Equipment		15,000	15,000	15,000		
	20-1-9-00-16-510 EDWF Repairs - Building & Grounds		70,565	14,294	70,565		
	20-1-9-00-16-570 EDWF Sewer		45,000	35,000	45,000		
	20-1-9-00-17-120 L2 Wells Chemicals - Treatment		12,650	13,915	14,611		
	20-1-9-00-17-500 L2 Wells Repairs - Equipment		15,000	15,000	15,000		
Grand Total	20-1-9-00-17-505 L2 Wells Buildings & Grounds		10,000	10,000	10,000		
	20-1-9-00-17-570 L2 Wells Sewer		3,500	3,500	3,500		
	20-1-9-00-25-010 Engineering		25,000	6,000	10,000		
Operating Total			10,781,061	9,566,761	11,089,457		
Grand Total			32,873,089	25,558,564	21,807,352		

**Appendix B - UERWA 10-Year Capital Plan**

Account # & Description	Dept Groups	Project Type	2023 Budget	2024 Budget	2025 Budget	2026 Budget	2027 Budget	2028 Budget	2029 Budget	2030 Budget	2031 Budget	2032 Budget	Total
20-1-2-00-00-131 Aerial Imagry Service Area Mapping	Customer Service	Capital		50,000									50,000
20-1-2-00-00-012 Traer Ck Tank Investigation/Litigation	Engineering	Capital											-
20-1-2-00-00-136 Bolts Lake Reservoir	Engineering	Bond Project	425,000	375,000	750,000	1,500,000	18,750,000	18,750,000	18,750,000				59,300,000
20-1-2-00-00-994 Reservoir Storage Master Plan	Engineering	Capital	25,000	50,000									75,000
20-1-2-00-00-007 Traer Creek Tank	Field Ops	Capital											-
20-1-2-00-00-014 CRP- Wildridge BPS and PRV Improvements	Field Ops	Bond Project	2,880,000	2,000,000									4,880,000
20-1-2-00-00-015 CRP-UERWA WST Interior/Ext Painting	Field Ops	CRP											-
20-1-2-00-00-138 CRP-Arrowhead Transmission Main Rehab	Field Ops	Bond Project	700,000										700,000
20-1-2-00-00-218 Paint Edwards Well House	Field Ops	CRP											-
20-1-2-00-00-244 CRP-Pump Station Industrial Painting	Field Ops	CRP	75,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	525,000
20-1-2-00-00-398 Fire Flow Improvements (Share of AWWTF fireflow)	Field Ops	Capital											-
20-1-2-00-00-499 Edwards Transmission Line Phase 2	Field Ops	Bond Project											-
20-1-2-00-00-999 CRP-Distribution System Capital Replacement Prog.	Field Ops	CRP	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000	3,000,000
20-1-2-00-20-001 Dowd BPS Upgrades	Field Ops	Capital		52,920	476,280								529,200
20-1-2-00-20-101 - Beaver Creek BPS 1, 2, & 3 Rehabilitation	Field Ops	Capital	285,500	2,489,500									2,775,000
20-1-2-00-00-900 CRP-Capitalized Construction Management	Finance	Capital	566,500	515,000	515,000	515,000	515,000	515,000	515,000	515,000	515,000	515,000	5,201,500
20-1-2-00-00-325 CRP-Safety/Security	Human Resources	CRP	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000
20-1-2-00-00-024 CRP-OT Network Upgrade/Improvements	IT	CRP	5,000	20,000	20,000								45,000
20-1-2-00-00-019 CRP-Upgrade PLC 6 @ ADWF-Master PLC	Ops Tech	Bond Project	1,500,000										1,500,000
20-1-2-00-00-469 RTU System Upgrade	Ops Tech	Bond Project	50,000										50,000
20-1-2-00-47-100 OTS Equipment Inventory	Ops Tech	CRP-Inventory	10,000										10,000
20-1-2-00-00-028 Traer Creek Tank Replacement	Water	Bond Project	-										-
20-1-2-00-00-039 CRP-Fenno Well House/Raw Wtr Conveyance	Water	Bond Project											-
20-1-2-00-00-041 CRP-EDWF Heater Replacement	Water	CRP											-
20-1-2-00-00-043 CRP-Water Storage Tank Improvements	Water	CRP	180,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,530,000
20-1-2-00-00-044 CRP-ADWF Domestic Lift Station Rehabilitation	Water	CRP											-
20-1-2-00-00-133 Water Treatment Master Plan	Water	Capital	133,333										133,333
20-1-2-00-00-135 Water System Emergency Power	Water	Capital	50,000										50,000
20-1-2-00-00-140 ADWF Membrane Roof Replacement	Water	Capital	400,000										400,000
20-1-2-00-00-238 CRP-ADWF Metcalf Ditch	Water	CRP		-		200,000							200,000
20-1-2-00-00-260 CRP-UERWA Analyzer Replacement Allowance	Water	CRP	100,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	370,000
20-1-2-00-00-333 Zeta Potential Analyzer for Coagulant System	Water	Capital		82,500									82,500
20-1-2-00-00-350 Eagle-Vail Tanks WST #1 & #2 Replacment	Water	Bond Project				250,000	4,000,000						4,250,000
20-1-2-00-00-375 CRP-ADWF Plant Repairs	Water	CRP	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
20-1-2-00-00-376 CRP-EDWF Plant Repairs	Water	CRP	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
20-1-2-00-00-377 CRP-Wells/Misc Repairs	Water	CRP	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
20-1-2-00-00-462 ADWF High Zone Production Imp.-Design A13	Water	Bond Project		180,000	2,200,000								2,380,000
20-1-2-00-00-490 ADWF Administration Expansion	Water	Bond Project		-		2,300,000							2,300,000
20-1-2-00-30-001 Cordillera Autoflush Hydrants	Water	Capital		75,000	75,000								150,000
20-1-2-00-30-300 Cordillera East1 (Teacup) Tank Expansion	Water	Capital		57,858	491,400								549,258
20-1-2-00-30-301 - Cordillera West Tank 1 Rehabilitation	Water	Capital	76,200	685,800									762,000
		<b>Total</b>	<b>8,071,533</b>	<b>7,473,578</b>	<b>5,367,680</b>	<b>5,605,000</b>	<b>24,105,000</b>	<b>20,105,000</b>	<b>20,105,000</b>	<b>1,355,000</b>	<b>1,355,000</b>	<b>1,355,000</b>	<b>94,897,791</b>

## Appendix C

### UERWA Capital Project Budget Narratives

#### Engineering

<b>Project Name: Reservoir Storage Master Plan</b>	<b>Account Code: 20.1.2.00.00.994</b>
<b>Project Description:</b> Project involves continued development and analysis of the District and Authority's water rights hydrology model, coordination with HSP on their Homestake System Model, coordination with the Eagle River Watershed Council Community Water Plan, and development of statement and purpose and need for permitting of future water supply project.	
<b>Statement of Need:</b> Water supply planning shows that the Authority will need to develop additional in-basin storage supplies to meet demands of additional growth and provide strategic reserve for uncertainty regarding climate change, growth projections, and increased administrative calls.	
<b>2023 Budget Request:</b> 25,000	
<b>Total Project Budget:</b> 175,000	
<b>Basis of Estimate:</b> Estimate is based upon consultant contracts, past history of spending, and anticipated level of effort for calendar year.	
<b>Engineer:</b> LRE, Helton & Williamson, Harvey Economics	<b>Project Manager:</b> Jason Cowles

<b>Project Name: Bolts Lake Reservoir</b>	<b>Account Code: 20.1.2.00.00.136</b>
<b>Project Description:</b> Capital fund for UERWA portion (75/25) for land purchase, permitting, design, and construction of a future water supply project.	
<b>Statement of Need:</b> Statement of Need: Needed to provide strategic in-basin storage to meet demands of future development, provide minimum in-stream flows, and hedge against uncertainty of climate change.	
<b>2023 Budget Request:</b> 425,000 (UERWA)	
<b>Total Project Budget:</b> 66,449,223 (UERWA)	
<b>Basis of Estimate:</b> 75% of actual land costs, rough conceptual estimates on design/permitting costs, and a conceptual engineers estimate.	
<b>Engineer:</b> Shannon-Wilson and Leonard Rice	<b>Project Manager:</b> Jason Cowles

## Field Operations

<b>Project Name: Wildridge BPS and PRV Improvements</b>	<b>Account Code: 20.1.2.00.00.014</b>
<b>Project Description:</b> Replacement and rehabilitation for various distribution system assets in the Wildridge Subdivision, namely, tanks, pump stations, PRVs, and other appurtenances. The various facilities are at end of life cycle (40+ years old).	
<b>Statement of Need:</b> The high elevation, 40 year old subdivision infrastructure scored very high in the 2020 Distribution System Master Plan condition assessment both for consequence and likelihood of failure. This project was the first project output of the plan recommended. In fact, a budget was created for this project in 2017 due to operational concerns but was put on hold in favor of completing the master plan. The master plan served to reinforce the priority of this important project.	
<b>2023 Budget Request:</b> 2,880,000	
<b>Total Project Budget:</b> 5,000,000	
<b>Basis of Estimate:</b> 30% Design Cost Estimate	
<b>Engineer:</b> AE2S	<b>Project Manager:</b> Carter Keller

<b>Project Name: Arrowhead Transmission Main Rehab</b>	<b>Account Code: 20.1.2.00.00.138</b>
<b>Project Description:</b> Investigation, design, and construction of rehabilitated or replaced 16" transmission main feeding the Arrowhead WST. Scope also includes a valve vault near the tank to help with tank balancing with CVC in the Edwards low zone. Project originally budgeted in 2020, but another design alternative was explored, delaying implementation for a year.	
<b>Statement of Need:</b> Corrosive soils in the area led to a line break in 2019 on this critical infrastructure. In addition, much of the pipeline has seen excessive fill atop the pipe throughout the years.	
<b>2023 Budget Request:</b> 700,000	
<b>Total Project Budget:</b> 2,350,000	
<b>Basis of Estimate:</b> 30% Design Level Engineer's Estimate	
<b>Engineer:</b> Tetra Tech, Inc.	<b>Project Manager:</b> Mark Mantua

<b>Project Name: CRP – Distribution Industrial Painting</b>	<b>Account Code: 20.1.2.00.00.244</b>
<b>Project Description:</b> Annual account for small industrial painting projects at distribution system facilities such as PRV vaults and pump stations.	
<b>Statement of Need:</b> Annual account for painting various water system appurtenances. Industrial coatings are critical to extend the lifespan of various system assets due to corrosion.	
<b>2023 Budget Request:</b> 75,000	
<b>Total Project Budget:</b> Annual	
<b>Basis of Estimate:</b> Annual account, based on roughly 2-3 facilities per year	
<b>Engineer:</b> N/A	<b>Project Manager:</b> Tony Roberts/Niko Nemcanin

<b>Project Name: CRP – Water Main Capital Replacement Program</b>	<b>Account Code: 20.1.2.00.00.999</b>
<b>Project Description:</b> Annual account for small projects such as small mainline extensions, replacements, or hydrant relocations for the UERWA Water System.	
<b>Statement of Need:</b> Annual account for large purchase/small projects related to water mains and appurtenances in the Vail water system. Examples would include: working with developers/other entities on small projects, hydrant relocations, etc.	
<b>2023 Budget Request:</b> 300,000	
<b>Total Project Budget:</b> Annual	
<b>Basis of Estimate:</b> Annual account, based on potential expenditures	
<b>Engineer:</b> N/A	<b>Project Manager:</b> Niko Nemcanin

<b>Project Name: Beaver Creek BPS 1, 2, 3 Rehabilitation</b>	<b>Account Code: 20.1.2.00.20.101</b>
<b>Project Description:</b> Identified in the 2020 Water Distribution Master Plan and included due to high scores on both consequence and likelihood of failure. Aging assets in high elevation pump stations are in need of rehabilitation/replacement throughout the distribution system. Beaver Creek 3, 2, and 1 are the top three highest scoring pump station assets in the risk-based assessment. Originally budgeted as separate projects and only including BPS 3 and 2, the projects are combined and BPS 1 added to the scope.	
<b>Statement of Need:</b> Pumps condition and reliability scored poorly in the condition assessment portion of the 2020 master plan. In addition, a preliminary review revealed that the pumps run off of their curve, reducing their efficiency. Additional scope includes connection point for portable mobile generators in the event of a power outage. Scope includes replacement of pumps and motors and some piping and some minor building improvements.	
<b>2023 Budget Request:</b> 250,000	
<b>Total Project Budget:</b> 2,775,000	
<b>Basis of Estimate:</b> Conceptual master plan level estimate plus additional escalation and contingency.	
<b>Engineer:</b> Burns McDonnell	<b>Project Manager:</b> Woodson Spring

## Finance

<b>Project Name: CRP – Capitalized Construction Management</b>		<b>Account Code: 20.1.2.00.00.900</b>
<b>Project Description:</b> As provided in the Authority Agreement, this account compensates the District for project management by the Engineering department for Authority projects.		
<b>Statement of Need:</b> Required per Authority Agreement and included in the base compensation.		
<b>2023 Budget Request:</b> 566,500		
<b>Total Project Budget:</b> Annual		
<b>Basis of Estimate:</b> Annual account		
<b>Engineer:</b> N/A		<b>Project Manager:</b> N/A

## IT

<b>Project Name:</b> CRP – OT Network Upgrades/Improvements		<b>Account Code:</b> 20.1.2.00.00.024
<b>Project Description:</b> Annual account for large OTS purchases or small projects outside of expense budgets		
<b>Statement of Need:</b> Annual account, having funds on hand can help if a need arises mid-year		
<b>2022 Budget Request:</b> 5,000		
<b>Total Project Budget:</b> Annual		
<b>Basis of Estimate:</b> In house conceptual estimate		
<b>Engineer:</b> N/A		<b>Project Manager:</b> Fred Fernandez/Dan Caffery

## Operational Technology

<b>Project Name:</b> ADWF Master PLC Upgrade	<b>Account Code:</b> 20.1.2.00.00.019
<b>Project Description:</b> Replacement of outdated and unreliable controls and communications network at the ADWF. Includes new server room located in the western portion of the plant, new fiber optic cabling throughout the plant, and new remote I/O and PLC equipment throughout for full redundancy and increased reliability. Total project budget originally 1,050,000 last year, small adjustment needed this year. Project timing adjusted from a fast track delivery to a more traditional design-bid-build approach.	
<b>Statement of Need:</b> Existing PLC is unreliable and has no room for future expansion. Server room relocation is required for ADWF Admin project; project timing led to its inclusion in this project.	
<b>2023 Budget Request:</b> 1,500,000	
<b>Total Project Budget:</b> 2,966,245	
<b>Basis of Estimate:</b> Guaranteed Maximum Price (GMP) Proposal from Hensel Phelps	
<b>Engineer:</b> Stantec, Inc.	<b>Project Manager:</b> Jenna Beirsto

<b>Project Name:</b> OTS Spare Parts Inventory	<b>Account Code:</b> 20.1.2.00.47.100
<b>Project Description:</b> Annual account for purchase of electrical and controls equipment such as motors, starters, VFDs, communication cards, etc.	
<b>Statement of Need:</b> Annual account for planned and potentially unforeseen purchases. Critical due to supply chain issues that could turn a simple card replacement into a months-long equipment outage.	
<b>2023 Budget Request:</b> 10,000	
<b>Total Project Budget:</b> Annual	
<b>Basis of Estimate:</b> Annual account, based on past expenditures	
<b>Engineer:</b> N/A	<b>Project Manager:</b> Daniel Caffery



## Water

Project Name: Fenno Well House/Raw Water Conveyance	Account Code: 20.1.2.00.00.039
<b>Project Description:</b> Replacement of the Fenno Well House, a small treatment facility in Cordillera that does not meet current codes for electrical and chemical storage. Project includes replacement of the well house facility, improved contact time, new electrical (distribution pumps), piping, instrumentation and associated architectural and site work. Also included is the replacement of certain wells and appurtenances such as meters, electrical, and piping. Wellhouse is completed and the project team is slowly working on pulling, inspecting, repairing and replacing well infrastructure as needed. Difficult access to sites and renegotiation of easements in numerous production well locations delayed the implementation of the well phase.	
<b>Statement of Need:</b> Project was identified in previous 2009 Master Planning efforts and again in the recent 2020 Distribution Master Plan. Mostly related to code compliance, reliability, and replacement of aging infrastructure. Added to the scope is design work and construction of improvements at the 7 Fenno Wells due to pipeline condition, electrical concerns, and future RTU compatibility.	
<b>2023 Budget Request:</b> N/A – rollover from 2022	
<b>Total Project Budget:</b> 3,899,955	
<b>Basis of Estimate:</b> Actual design and construction costs for wellhouse plus 30% conceptual estimate for well improvements currently under investigation/design.	
<b>Engineer:</b> SGM, Inc.	<b>Project Manager:</b> Carter Keller

Project Name: Water Storage Tank Improvements	Account Code: 20.1.2.00.00.043
<b>Project Description:</b> Annual account for small tank rehabilitation/repair projects throughout the UERWA system's water storage tank inventory.	
<b>Statement of Need:</b> Periodic tank inspections often reveal potential sanitary issues such as separated overflow pipe joints, hatch issues, etc. The account was created in response to our 2019 CDPHE Sanitary Survey for the Vail System and represents a proactive approach to addressing storage tank deficiencies.	
<b>2023 Budget Request:</b> 180,000	
<b>Total Project Budget:</b> Annual	
<b>Basis of Estimate:</b> Annual account, based on 2019 WST expenditures and annual workloads	
<b>Engineer:</b> Western Water Solutions	<b>Project Manager:</b> Woodson Spring

<b>Project Name: Cordillera West Tank 1 Rehabilitation</b>	<b>Account Code: 20.1.2.00.30.301</b>
<b>Project Description:</b> In 2018, Arrowhead and Cordillera West 1 tanks were inspected by SGM. They are steel tanks which periodically require recoating to extend the project life cycle. It was determined at the time to push Cordillera West 1 another 5 years. The tank requires sandblasting, weld repairs as needed, and application of a new engineered coating system. In addition, the venting, hatches, and overflows often require modifications to bring them up to current CDPHE standards.	
<b>Statement of Need:</b> Originally budgeted in 2019 and deferred due to favorable condition at the time, it is critical to recoat steel WSTs on a periodic basis to ensure their integrity, mitigate failure and leakage concerns, and avoid large replacement costs.	
<b>2023 Budget Request:</b> 76,200	
<b>Total Project Budget:</b> 762,000	
<b>Basis of Estimate:</b> 2020 Distribution Master Plan estimate plus small escalation	
<b>Engineer:</b> Western Water Solutions	<b>Project Manager:</b> Woodson Spring

<b>Project Name: ADWF Domestic Lift Station Rehabilitation</b>	<b>Account Code: 20.1.2.00.00.044</b>
<b>Project Description:</b> The ADWF is served by a domestic lift station conveying its domestic wastewater to the Avon WWTF for treatment. The lift station is unreliable and needs to be rehabilitated.	
<b>Statement of Need:</b> Work was originally a part of the ADWF Administration Expansion project but due to deferring that work, a separate account was created to rehabilitate the domestic lift station as it is a more urgent need.	
<b>2023 Budget Request:</b> N/A – rollover from 2022	
<b>Total Project Budget:</b> 80,000	
<b>Basis of Estimate:</b> Vendor quotes and contractor quotes for installation	
<b>Engineer:</b> N/A	<b>Project Manager:</b> Mark Mantua

<b>Project Name: Water Treatment Master Plan</b>	<b>Account Code: 20.1.2.00.00.133</b>
<b>Project Description:</b> UERWA portion of a comprehensive master for water treatment and production facilities (plants, wells, raw water) plan using information contained in a detailed condition assessment, future growth, regulatory requirements, etc. Project originally budgeted for 2019 kickoff and due to challenges and management turnover, was contracted in 2022 and is scheduled to be completed in 2023.	
<b>Statement of Need:</b> The distribution system master plan was completed in 2020 which served as a background for system demands and identified the need for future production improvements. A comprehensive treatment/production master plan will help guide future capital needs in the water treatment/production category using the distribution plan as an input. A master plan will allow for better future capital spending data and guide the roughly \$2M/year invested in the ADWF, for example, to optimize future capital outlay to best address operational challenges, growth, regulatory changes, and obsolete or aging infrastructure replacement.	
<b>2023 Budget Request:</b> 133,333	
<b>Total Project Budget:</b> 333,333	
<b>Basis of Estimate:</b> Carollo Engineering contract	
<b>Engineer:</b> Carollo Engineers	<b>Project Manager:</b> Jenna Beairsto

<b>Project Name: Water System Emergency Power</b>	<b>Account Code: 20.1.2.00.00.135</b>
<b>Project Description:</b> This project is an ongoing effort to bolster the water distribution system's resiliency in the event of an extended power outage. The multi-year project includes a study or priority of which improvements are required at which facilities and construction of items such as generators and generator connections/transfer switches.	
<b>Statement of Need:</b> This budget was first approved in 2018 to address the water distribution system's ability to function during an extended power outage. Two small projects were completed and some self performed work at four booster pump stations in the Authority are currently underway.	
<b>2023 Budget Request:</b> N/A – rollover from 2022	
<b>Total Project Budget:</b> 225,000	
<b>Basis of Estimate:</b> N/A – ongoing multi-year implementation	
<b>Engineer:</b> AE2S	<b>Project Manager:</b> Various

<b>Project Name: UERWA Analyzer Replacement Allowance</b>	<b>Account Code: 20.1.2.00.00.260</b>
<b>Project Description:</b> Annual account for replacement of various analyzers throughout the water treatment process, critical to regulatory compliance, process control and water production and data collection. This account is a consolidation of various small CRP line items over the years.	
<b>Statement of Need:</b> Analyzers are a critical appurtenance to water treatment facilities, controlling chemical dosing, pump rates, etc. They often require replacement or spare purchasing.	
<b>2023 Budget Request:</b> 100,000	
<b>Total Project Budget:</b> Annual	
<b>Basis of Estimate:</b> Annual account based on consolidation of several smaller accounts and vendor quotes	
<b>Engineer:</b> N/A	<b>Project Manager:</b> Wade McCaulley/Scott Morrow

<b>Project Name: ADWF Plant Repairs</b>	<b>Account Code: 20.1.2.00.00.375</b>
<b>Project Description:</b> Annual account for various small projects and large purchases required at the ADWF that do not fit in expense budgets but do not elevate to a large capital project.	
<b>Statement of Need:</b> Project was created by consolidating numerous smaller projects and gives operators more flexibility in responding to needs as they arise.	
<b>2023 Budget Request:</b> 100,000	
<b>Total Project Budget:</b> Annual	
<b>Basis of Estimate:</b> Annual account based on consolidation of several smaller accounts and vendor quotes	
<b>Engineer:</b> N/A	<b>Project Manager:</b> Wade McCaulley

<b>Project Name: EDWF Plant Repairs</b>	<b>Account Code: 20.1.2.00.00.376</b>
<b>Project Description:</b> Annual account for various small projects and large purchases required at the EDWF that do not fit in expense budgets but do not elevate to a large capital project.	
<b>Statement of Need:</b> Project was created by consolidating numerous smaller projects and gives operators more flexibility in responding to needs as they arise.	
<b>2023 Budget Request:</b> 100,000	
<b>Total Project Budget:</b> Annual	
<b>Basis of Estimate:</b> Annual account based on consolidation of several smaller accounts and vendor quotes	
<b>Engineer:</b> N/A	<b>Project Manager:</b> Scott Morrow

<b>Project Name: Wells/Misc Repairs</b>	<b>Account Code: 20.1.2.00.00.377</b>
<b>Project Description:</b> Annual account for various small projects and large purchases required at downvalley wells in Edwards and Cordillera that do not fit in expense budgets but do not elevate to a large capital project.	
<b>Statement of Need:</b> Project was created by consolidating numerous smaller projects and gives operators more flexibility in responding to needs as they arise.	
<b>2023 Budget Request:</b> 100,000	
<b>Total Project Budget:</b> Annual	
<b>Basis of Estimate:</b> Annual account based on consolidation of several smaller accounts and vendor quotes	
<b>Engineer:</b> N/A	<b>Project Manager:</b> Scott Morrow

<b>Project Name: Cordillera East 1 (Teacup) Tank Expansion</b>	<b>Account Code: 20.1.2.00.30.300</b>
<b>Project Description:</b> Identified in the 2020 Distribution Master Plan, this project involves expanding the small (3,000 gallon) tank with a larger tank to provide for more operational buffer. Control improvements to the facility and to the Cordillera East 1 BPS put the project on hold.	
<b>Statement of Need:</b> Cordillera East 1 tank is known as 'Teacup' due to its size. It was created to break pressure as water is pumped up the hill. It has been an operational issue for decades and is subject to frequent tank overflows, some of which can potentially damage property.	
<b>2023 Budget Request:</b> N/A – rollover from 2023	
<b>Total Project Budget:</b> 607,116	
<b>Basis of Estimate:</b> Conceptual cost estimate from master plan plus additional contingency/escalation	
<b>Engineer:</b> TBD	<b>Project Manager:</b> TBD

<b>Project Name: ADWF Membrane Roof Replacement</b>	<b>Account Code: NEW ACCOUNT</b>
<b>Project Description:</b> The Membrane Roof at the ADWF is at the end of its useful life and needs to be replaced. Numerous areas inside the building exhibit signs of leaking roof. A small portion was replaced in 2022 above the new server room but an entire roof replacement is required.	
<b>Statement of Need:</b> Roof replacement was initially planned to occur in conjunction with the ADWF Administration Expansion project, but the expansion project was put on hold in favor of other projects while the roof continues to deteriorate. The roof leaks in numerous areas and is at the end of its useful life.	
<b>2023 Budget Request:</b> 400,000	
<b>Total Project Budget:</b> 400,000	
<b>Basis of Estimate:</b> Vendor Quotes	
<b>Engineer:</b> N/A	<b>Project Manager:</b> TBD



**UPPER EAGLE REGIONAL  
WATER AUTHORITY**

**BOARD ACTION REQUEST**

**TO:** Board of Directors  
**FROM:** David Norris, Director of Business Administration  
**DATE:** November 17, 2022  
**RE:** Resolution to Adopt 2023 Rates & Fees

**GOVERNED BY:**

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

The Town of Avon

**Summary of Subject:** Staff is recommending that the Board adopt the proposed 2023 rates and fees resolution.

**Discussion and Background:** The Authority legally noticed the November 17<sup>th</sup> board meeting for the public hearing to consider the 2023 proposed rates and fees. The District staff has met with the Authority Budget Subcommittee, including members George Gregory and Geoff Dreyer, to discuss the rates and fees proposal. A copy of the proposed 2023 budget was delivered to the full Board on Oct. 14 and a revised budget was included in the October Board packets.

Attached is the full resolution to:

- Adopt the 2023 Rates & Fees

**Legal Issues:** The Board is legally required to deliver a full budget to the State no later than January 31 of 2023. As part of the comprehensive budget planning rates and fees were considered and must be adopted to balance the budget as presented.

**Budget Implication:** This will provide revenues considered in preparing the full budget for the Authority for its operations and capital spending in fiscal year 2023.

**Recommendation:** Staff recommends the Board approve the attached resolution for the proposed 2023 budget and rates.

**Board Actions Requested:**

1. Open the public budget hearing
2. Consideration of the Resolution and Motion
  - a. **Motion to adopt the attached resolutions for the purpose of adopting the proposed 2023 rates and fees as presented.**
3. Close the public meeting

**Attachments:**

Resolution to adopt 2023 Proposed Rates & Fees  
Appendix A – 2023 UERWA Rates & Fees

**UPPER EAGLE REGIONAL WATER AUTHORITY**  
**A RESOLUTION INCREASING CERTAIN WATER SERVICE RATES & FEES**

**WHEREAS**, the Upper Eagle Regional Water Authority (“Authority”) is a quasi-municipal corporation and political subdivision of the State of Colorado and a duly organized and existing water authority pursuant to law; and

**WHEREAS**, the Authority Board of Directors (“Board”) has the authority to fix and from time to time increase or decrease fees, rates, and charges pursuant to law for services, programs or facilities furnished by the Authority; and

**WHEREAS**, the Board hereby finds and determines that it is in the best interest of the public health, welfare and safety of the Authority residents and visitors that the Authority collect adequate revenues to pay ongoing operation, maintenance, capital improvement, and water rights costs; and

**WHEREAS**, the Board has considered the most recent rate analysis performed by Authority staff and Authority water counsel, and finds the recommended rates, fees and charges contained therein are reasonably related to the overall cost of service; and

**WHEREAS**, more than thirty days in advance notice to the Authority’s customers of the Board’s intent to consider rate increases at the November 17, 2022, regular meeting, was provided in accordance with Section 32-1-1001(2)(a)(IV), C.R.S.

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

1. The Water and Wastewater Service Rates & Fees, as recommended by staff and attached hereto as Exhibit A and incorporated herein by this reference, are hereby adopted to be effective January 1, 2023.
2. This Resolution shall supersede any contrary provision contained in the Authority’s Rules and Regulations, which shall be modified as soon as reasonably practical to conform with the provisions set forth in this Resolution; provided, however, if there is any charge or fee that is set forth in the Rules and Regulations or elsewhere established, which is not changed by this Resolution, said fee is hereby ratified and shall remain in full force and effect.

Adopted this 17<sup>th</sup> day of November 2022.

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George Gregory – President

(seal)



## Appendix A



### UERWA 2023 Rates

Water Service Base Charge (per SFE)		Water Usage Rates (per SFE)	
Base Rate	\$23.53	Tier 1 (0-6 kgal)	\$4.75
Debt Service 2013 Bonds	\$3.34	Tier 2 (6-12 kgal)	\$7.39
Debt Service 2020(A&B) Bonds	\$9.55	Tier 3 (12-18 kgal)	\$12.89
Capital Replacement Program	\$4.75	Tier 4 (18-24 kgal)	\$26.86
Water Base Portion of Bill per SFE	\$41.17	Tier 5 (more than 24 kgal)	\$40.30
(SFE X max kgal = allowable usage for each tier)			
Wastewater Service Base Charge (per SFE)			
Base Service Charge (min 5 kgal)	\$ 35.64		
Additional Winter Averaging Charge (per kgal)	\$7.13		
Debt Service 2017 Bonds	\$2.77		
Debt Service 2020 (A&B) Bonds	\$7.89		
Capital Replacement Program	\$5.31		
Wastewater Base Portion of Bill per SFE	\$51.61		
Outdoor Usage			
Irrigation Usage Rates (no structure)		Coverage Based Irrigation Usage Rates (per SIC)	
SIR (SFE factor based on meter size)/kgal		SIC (SFE factor calculated from irrigated sq.ft.)/kgal	
Tier 1 (0-6 kgal)	\$6.91	Tier 1 (max 67 kgal)	\$6.91
Tier 2 (6-12 kgal)	\$10.74	Tier 2 (67-134 kgal)	\$10.74
Tier 3 (12-18 kgal)	\$20.55	Tier 3 (134-178 kgal)	\$18.23
Tier 4 (18-24 kgal)	\$33.03	Tier 4 (178-233 kgal)	\$24.41
Tier 5 (more than 24 kgal)	\$49.55	Tier 5 (more than 233 kgal)	\$29.28
		1 SIC is equivalent to 43,560 sq. ft of irrigated area	
Sprinkler Account Irrigation Usage Rates (per SIR)			
A Sprinkler Account's SIR is either equivalent to the number of SFEs of an associated structure or the size of the meter where there is no associated structure.			
Tier 1 (0-20)	\$6.91		
Tier 2 (21-30)	\$10.74		
Tier 3 (31-40)	\$20.55		
Tier 4 (41-50)	\$33.03		
Tier 5 (more than 50 kgal)	\$49.55		
Construction Usage			
Temporary/Suspended Service Charges & Rates (Per SFE)		Seasonal Fire Hydrant Use	
Water Service Base Charge	\$29.41	Hydrant and Meter Damage Deposit	\$2,750.00
Wastewater Service Base Charge	\$33.79	Meter Install/Removal Fee	\$158.00
Water Usage Rates		Weekly Meter Rental Fee	\$143.00
Tier 1 (0-6 kgal)	\$6.91	Water Usage Rates	
Tier 2 (6-12 kgal)	\$10.74	Tier 1 (0-9 kgal)	\$6.91
Tier 3 (12-18 kgal)	\$20.55	Tier 2 (9-18 kgal)	\$10.74
Tier 4 (18-24 kgal)	\$33.03	Tier 3 (18-36 kgal)	\$20.55
Tier 5 (more than 24 kgal)	\$49.55	Tier 4 (36-72 kgal)	\$33.03
		Tier 5 (mor than 72 kgal)	\$49.55
Only available April 15 through October 15			

## Appendix A

### 2023 Impact Fees

Upper Eagle Regional Water Authority													
DISTRICTS	RESIDENTIAL						COMMERCIAL - Based on Meter Size						
	Residential Base	Up to X Sq Ft	Thereafter per Sq Ft	Efficiency Unit (0.5 SFE)	Accomm Unit (0.35 SFE)	Swimming Pools per Sq Ft	¾" 1.5 SFE	1" 2.6 SFE	1½" 5.8 SFE	2" 10.3 SFE	3" 23.0 SFE	4" 40.9 SFE	6" 92.1 SFE
UERWA WSIF (Water System Impact Fee)	Floor AreaTiers	Sq Ft in TIER	Price per Sq Ft	TIER TOTAL									
	TIER 1	0 - 2,500	\$5.96	\$14,899									
	TIER 2	2,501 - 3,500	\$7.46	\$7,455									
	TIER 3	3,501 - 5,000	\$9.31	\$13,970			\$20,426	\$35,406	\$78,982	\$140,262	\$313,206	\$556,961	\$1,254,185
	TIER 4	5,001 +	\$11.65	+ overage									
If connecting to the Wastewater System the following Impact Fee assessment shall apply:													
ERWSD- Wastewater	0	N/A	\$5.08			\$2.20	\$17,419	\$30,192	\$67,352	\$119,607	\$267,085	\$474,946	\$1,069,499
The following Other Impact Fee assessments may also apply:													
UERWA-Irrigation Water Impact Fee	\$1.42 per sq. ft. of irrigation						Applies to new open areas, new parks and commercial irrigated areas						
West Edwards Sewer Encumbrance Fee	\$1,100 per SFE						\$1,100 per SFE						

2023 Inclusion, Dedication & Cash-in-lieu		
Eagle River Water & Sanitation District	Upper Eagle Regional Water Authority	
DEVELOPMENT FEE/ DEDICATION/ DEPOSIT	RESIDENTIAL	COMMERCIAL
Inclusion Fee	\$1,100.00	
Treated Water Storage Dedication (New Tank)	Where no existing regional water storage is sufficient to serve the proposed development, an applicant will be required to construct and dedicate water storage sufficient to serve the needs of the development. See Treated Water Storage Dedication policy.	
Water Rights Dedication Review Deposit	\$1,650.00	
Water Rights Dedication Cash-in-lieu	\$66,063 per consumptive acre-foot of water*	

Appendix A

**2023 Other Fines and Fees**

<b>2023 OTHER FINES AND FEES</b>	
<b>Description</b>	<b>Fee/Fine</b>
Backflow Program Noncompliance Fine	\$500 per violation/per month
Fire Hydrant Meter Relocation Fee	\$200
Penalty Noncompliance Fee	\$150 per SFE/per month
Recording Fee	Actual Cost
Meter Inspection & Re-inspection Fee	\$200
Returned Check or ACH Fee	\$50
Service and Inspection Calls	\$200
Service Turn-off fee for remodel or construction	\$100
System and/or Meter Tampering Fine	\$5000 per violation
Turn-off and Turn-on Fee for unpaid charges	\$150
Unauthorized Use Fine	\$2000 per violation
Transfer of Service Fee	\$145
Account Reactivation Fee	\$100
New Connection Application Fee	\$150
Easement Encroachment Review	\$450
Variance Review	\$450
Development Approval Process	\$1,675
Infrastructure Acceptance Process	\$1,950
Waste Hauler Discharge Annual Permit Fee	\$200
Waste Hauler Discharge Fee	\$0.25 per gallon (charge based on size of tank regardless of actual volume)



**UPPER EAGLE REGIONAL  
WATER AUTHORITY**

**BOARD ACTION REQUEST**

**TO:** Board of Directors  
**FROM:** David Norris, Director of Business Administration  
**DATE:** November 17, 2022  
**RE:** 2023 Operations Agreements with the District

**GOVERNED BY:**

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

The Town of Avon

**Summary of Subject:** The Authority annually approves operations agreements with the Eagle River Water & Sanitation District. Updates to those agreements were made to reflect rate and fee changes.

**2023 Operations Agreement with the Eagle River Water & Sanitation District**

This agreement outlines operations and management services to the Authority for 2023. Though the agreement automatically renews each year on January 1, annual board approval is desirable from a records administration standpoint, as well as to call the board's attention to any changes since the prior year.

**Discussion/Background:** The District provides full contract operations and management services to the Authority through an operations agreement. The 2023 agreement has been adjusted to align to the budget proposed for the agreement, as well as adjustments to Labor and Operating costs to reflect actual costs.

**Legal Issues:** None.

**Budget Implications:** As noted above, Exhibits A, B and E were updated to reflect the rates in the 2023 District budget.

**Recommendation:** We recommend the Board approve the 2023 Operations Agreement as presented.

**Suggested Resolution/Motion:** To approve the 2023 Operations Agreement with the District as presented.

**Attached Supporting Documentation:** 2023 Services Agreement with the District

**OPERATIONS AGREEMENT  
EAGLE RIVER WATER & SANITATION DISTRICT AND  
UPPER EAGLE REGIONAL WATER AUTHORITY**

This Agreement is entered into as of the 17<sup>th</sup> day of November 2022, to be effective January 1, 2023, by and between UPPER EAGLE REGIONAL WATER AUTHORITY, a political subdivision and a public corporation of the State of Colorado ("Authority"), and EAGLE RIVER WATER & SANITATION DISTRICT, a quasi-municipal corporation of the State of Colorado ("District").

WHEREAS, among its other functions Authority owns and operates a water supply, treatment, and distribution system substantially within the boundaries of District; and

WHEREAS, Authority does not have the personnel or equipment to operate and maintain its water supply, treatment, and distribution system; and

WHEREAS, District has sufficient experience, personnel, and equipment to perform the operations and maintenance services desired by Authority; and

WHEREAS, Authority has constructed and owns facilities requiring operation and maintenance services of District; and

WHEREAS, Authority and District desire that all previous Operations Agreements be superseded by this Agreement.

NOW, THEREFORE, in consideration of the premises, the mutual advantages accruing to the parties hereto and the mutual undertakings herein contained, the parties hereto agree as follows:

**ARTICLE 1  
GENERAL CONDITIONS**

- 1.1 District shall provide in a good and workmanlike manner the services described in this Agreement upon the terms and conditions herein stated. District shall furnish services of its various employees and staff in the management, administration, annual capital plan management, and operation and maintenance of:
  - 1.1.1 all equipment and facilities under the control and/or ownership of Authority including, but not limited to diversion structures, water treatment plants, wells, the interconnection with District water system, raw water pumps and transport lines, treated water distribution lines, hydrants and valves, pumps and storage tanks, water meters, and;
  - 1.1.2 any other water facilities now owned or hereafter acquired, controlled, or operated by Authority.
  - 1.1.3 All water facilities and systems now owned or hereafter acquired, controlled, or operated by Authority, together with all additions, improvements or replacements shall be collectively referred to as "Authority's Facilities."
- 1.2 District shall comply with all applicable local, State and Federal laws, rules, and regulations in its operation of Authority's Facilities.
- 1.3 District shall provide the services described herein, in accordance with the rules and regulations of District and Authority.
- 1.4 District shall be an independent contractor, and nothing herein contained shall be construed to create the relationship of principal and agent or employer and employee between Authority and

District. Any person or party hired by District shall be the employee, agent, servant, or contractor of District.

## **ARTICLE 2 SCOPE OF SERVICES**

- 2.1 For Authority's Facilities, District shall provide all management, annual capital plan management, engineering and consultant management, operations and preventive, predictive and corrective maintenance, meter reading and billing, accounting and financial requirements, internal and external laboratory activities, and quality assurance necessary to manage and operate Authority's Facilities in compliance with legal and regulatory requirements and at levels which meet or exceed those generally accepted standards customary to the industry. District agrees to employ and provide to Authority the services of sufficient highly-trained, qualified and experienced personnel, including management, system operators, maintenance, finance, accounting, customer service and billing personnel; and, technical, laboratory and administrative staff who meet applicable State of Colorado certification and/or licensing requirements and who are so certified and/or licensed, to manage, operate, maintain and otherwise administer Authority's Facilities to supply, treat and distribute water to the customers of the Authority. Such employees shall be and remain the employees of the District and shall not be considered to be employees of the Authority for any purposes.
- 2.2 Specifically District shall:
- 2.2.1 Provide all personnel and associated wages, salaries, and benefits; fuel and vehicle expense necessary to manage, administer and operate Authority's Facilities in accordance with all United States Environmental Protection Agency and State of Colorado applicable laws, regulations, statutes and guidelines. At a minimum, District shall provide:
- a. management, including administration and support of Board activities;
  - b. computer-based management, finance and budgeting systems;
  - c. Computerized Maintenance Management Systems (CMMS);
  - d. quality control and assurance systems;
  - e. laboratory quality assurance and quality control (QA/QC) consistent with US Environmental Protection Agency guidelines and protocol and with state requirements for certification for bacteriological testing;
  - f. routine maintenance and repair of buildings and grounds up-keep and maintenance, and reasonable provisions to keep buildings and equipment secure from vandalism and other loss.
- 2.2.2 Assume all responsibility for, and liabilities and payment of, any fines resulting from District's negligent operation, or operation not in conformance with applicable laws or regulations.
- 2.3 District shall provide all personnel and associated wages, salaries, and benefits; fuel and vehicle expense necessary to operate and maintain Authority's Facilities including structures (e.g., buildings, water treatment plants, water storage tanks, pumping stations, distribution systems, meters) and equipment (e.g., mechanical, electrical, HVAC, instrumentation, communications, CMMS and Supervisory Control and Data Acquisition (SCADA) systems) to assure efficient long term reliability, and preservation of the capital investment therein. Maintenance shall be accomplished in accordance with manufacturers' recommendations, applicable O&M manuals, and customary industry standards. District shall employ a comprehensive preventive and predictive maintenance program. District shall also assure that all existing warranties and

maintenance agreements shall remain in full force and effect and shall maintain all warranties on equipment placed in service after the effective date of this Agreement. The foregoing notwithstanding, Authority shall pay for any computer hardware or software required to operate an Authority plant or system as well as any licensing fees for such processes. These items shall become the property of Authority.

- 2.4 District shall provide all personnel and associated wages, salaries, and benefits; materials, and other services necessary to administer and manage the Capital Construction, Capital Replacement Programs including, but not limited to engineering contract administration; review of engineering studies and designs; value engineering; construction contract administration; inspection services; progress payment processing; budget tracking and accounting; and dispute resolution. The Capital Construction and Capital Replacement Programs for this contract period is attached hereto as **Exhibit A**.
- 2.5 District shall provide all personnel and associated wages, salaries, and benefits; vehicle and fuel expense; materials and postage; and other services necessary to manage and operate the billing and customer service functions including, but not limited to management; meter reading; billing software and bill production; payment collection, processing and accounting; maintenance of customer account database; effective customer service and relations; support and quality assurance systems.
- 2.6 District shall provide all personnel and associated wages, salaries, and benefits; vehicle and fuel expense; materials and other services necessary to manage and operate the budgeting, accounting and financial systems in compliance with State law and regulation, and consistent with generally accepted accounting principles, including, but not limited to management; annual budget preparation; accounts receivable and accounts payable; complete financial accounting and budgeting; and periodic reporting to Authority Board of Directors and applicable State agencies.
- 2.7 District shall compile and maintain comprehensive daily and monthly records for facilities and systems operations, regulatory matters, laboratory analyses, maintenance plans and activities, financial matters, permit and compliance results, equipment status, and other relevant information in accordance with applicable laws, regulations, permits and guidelines. Reports will be provided to Authority Board of Directors, as appropriate, to assure compliance with the above.
- 2.8 To ensure effective communications, District staff shall:
  - 2.8.1 Meet up to twelve times (12) times per year with Authority's Board and such additional meetings as necessary with Authority's designated representative(s) to review operations, reports, ongoing cost information, and upcoming projects and/or operations which may impact service delivery or the public;
  - 2.8.2 Conduct a tri-annual comprehensive plant and system inspection with Colorado Department of Public Health and Environment (CDPHE) representative(s) to evaluate and document, regulatory compliance;
  - 2.8.3 Conduct annual safety inspections of all Authority facilities; and
  - 2.8.4 Conduct storage tank condition assessments every 5 years.
- 2.9 District shall perform routine inspections and evaluations of all facilities, following industry best management practices, and utilize the CMMS system to manage corrective, preventive or predictive maintenance. Any significant concerns shall be communicated to the Authority at the earliest possible opportunity. District shall notify Authority of specific capital expenditure needs for remedial maintenance, replacement, upgrading of structures, systems, equipment, etc. The evaluation shall include a cost-effectiveness analysis and/or other documentation in support of any repair/replacement/upgrade recommendations made by District. District shall prepare an

- Annual Capital and Capital Replacement Plan, and submittal shall be timed to coincide with Authority's annual budget preparation.
- 2.10 District shall comply with State public bid requirements when contracting on behalf of Authority for projects valued in excess of \$60,000.
- 2.11 District shall revise as necessary the comprehensive Emergency Preparedness Plan for interaction and coordination with agencies of Eagle County, town of Vail, town of Avon, town of Minturn and other special districts. District shall plan for and deal with any and all reasonably foreseeable emergencies or abnormal conditions that may arise and use best efforts to maintain or restore delivery of water services to Authority's customers.
- 2.12 District shall maintain responsible and responsive working relationships with Authority's customers, the public, and representatives of Authority, regulatory agencies, and other entities with which Authority has dealings.
- 2.13 District shall staff Authority's Facilities as necessary to carry out all functions of such Facilities in accordance with this Agreement.
- 2.14 District shall manage and direct the activities of the Authority's General Counsel in the provision of legal services for the Authority, including, but not limited to, contracts, collections, litigation, and property interests, and shall report on such activities to the Authority Board.
- 2.15 With regard to Authority water rights District shall:
- 2.15.1 Maintain a listing of and manage all water rights leased to or owned by Authority.
- 2.15.2 Prepare monthly accounting of daily diversions attributable to each Authority member, Cordillera Metropolitan District, Bachelor Gulch Metropolitan District and Traer Creek Metropolitan District, for review by the Authority's Water Engineer and submit to the State of Colorado.
- 2.15.3 Assign each Authority customer's water consumption to the appropriate water right, track consumption of each, compile monthly reports, and submit to Authority's Water Engineer for approval and submission to the State of Colorado.
- 2.15.4 Review each request for service to determine if there is currently availability to serve it.
- 2.15.5 Determine whether water rights are available for new development and expansions of current development.
- 2.15.6 Prepare an annual plan for the allocation and use of water resources, particularly during anticipated low flows in the Eagle River.
- 2.15.7 Advise the Authority Board of opportunities to purchase additional water rights for the Authority.
- 2.16 District shall not convey, waive or relinquish any interest in real property, including water rights, without prior approval of the Authority Board.

### **ARTICLE 3 OPERATIONS**

- 3.1 District shall have full responsibility for the operations of Authority's Facilities. Further, District shall be responsible to:



- 3.1.1 Operate diversion structures, wells, water treatment plants and water pump stations storage tanks and water distribution system in accordance with State laws and requirements of the Safe Drinking Water Act. Any amendments may require services subject to Article 11.2.5.
- 3.1.2 Cooperate fully with State and County authorities to perform regular tests for water quality in accordance with appropriate government standards.
- 3.1.3 Operate and maintain the pressure reducing stations which shall include the pressure reducing valves (PRV), pressure relief valves, gate/butterfly valves, strainers, and all other items necessary to keep the pressure reducing stations in operation. Each PRV shall be inspected, tested, and exercised in accordance with the District's regular maintenance schedule.
- 3.1.4 Check and exercise fire hydrant valves annually. Provide flow test observations as requested.
- 3.1.5 Identify buildings and uses within Authority's Service Area that require backflow prevention devices. Administer inspection and testing of all backflow devices annually.
- 3.1.6 Locate, on the ground, water mains and valves, as required.
- 3.1.7 Provide water shut offs for Authority customers.
- 3.1.8 Inspect the connection of water service lines to the distribution system and maintain as built location drawings of the service lines, as record drawings.
- 3.1.9 Provide coordination with other utility companies to ensure minimum interference between Authority's water facilities and District's facilities.
- 3.1.10 Acquire and administer easements, encroachment agreements, special use permits and any other real property interests necessary and appropriate in connection with operation or construction of Authority facilities. District shall not convey, waive, or relinquish any interest in real property, including water rights, without the prior approval of Authority Board.
- 3.1.11 Maintain a Geographical Information System (GIS) based mapping system of the water system infrastructure.
- 3.1.12 Respond to main breaks and meter/service leaks within one hour.
- 3.1.13 Witness pressure testing and perform periodic open ditch observation of water main and service line construction.
- 3.1.14 Perform bacteriological testing of newly constructed or repaired water mains.
- 3.1.15 Provide assistance in the design and operation of Authority's Facilities to ensure continuous economical and safe operation of the system.
- 3.1.16 Actively pursue improvements in effectiveness and efficiency, and reductions in the cost of operations and maintenance.
- 3.1.17 Perform ongoing water auditing and loss control programs to quantify water consumption and losses that occur in the distribution system and the non-revenue water accounting processes of Authority.

#### **ARTICLE 4**

#### **GENERAL MAINTENANCE**

- 4.1 During the term of this Agreement, District shall have full responsibility for the maintenance of Authority's Facilities, except as otherwise provided herein. District shall be responsible for performing routine, corrective, preventive and predictive maintenance procedures of the facilities and systems, all in a manner that assures the readiness and availability of equipment and systems on a consistent basis, and which ensures efficiency, long-term reliability and conservation of capital investment. District shall provide prudent maintenance in accordance with industry standards, equipment manufacturers' instructions and existing O&M manuals so that upon any termination of this Agreement facilities and systems will be returned to Authority in the same or better condition than at the effective date of this Agreement, normal wear and tear excepted. Such maintenance shall not include costs associated with flood, fire or other abnormal or extraordinary occurrences not within the control of District. Work performed by District or subcontractors shall be of the highest quality normally associated with work of the kind in which District's employees are engaged.
- 4.2 District shall maintain written Standard Operating Procedures (SOPs) as necessary to clarify, refine or supplement procedures provided in O&M manuals or manufacturers' maintenance manuals, or to describe maintenance practices which do not conform with these manuals.
- 4.3 District shall exercise all valves in the distribution system in accordance with industry standards and best management practices. District shall straighten and repair misaligned or broken valve boxes and perform necessary repairs on a time and material basis. In addition to the Services listed herein, District shall provide other services such as water line repairs and valve replacements, on a time and material basis, in accordance with the Fee Schedule for District Equipment and Personnel, attached hereto as **Exhibit B**.
- 4.4 All equipment or facilities added during the term of this Agreement will become the property of Authority. District shall maintain an inventory of Authority Facilities.
- 4.5 District shall be responsible for ensuring snow removal from fire hydrants within the Authority's service area.

## **ARTICLE 5 MAINTENANCE PLAN**

- 5.1 District shall follow a maintenance, repair and replacement plan and maintenance response schedule customary to best industry practices for Authority's Facilities and equipment.
- 5.2 Decisions as to whether to make unanticipated replacement or repair of parts, equipment, or other facilities in excess of budgeted funds will be made by Authority following recommendation from District. Authority's concurrence shall be evidenced by Authority's President and District's concurrence shall be evidenced by District's General Manager.
- 5.3 While performing any maintenance, replacement or repair of Authority's Facilities required by this Agreement, District shall comply with District's "Standard Specifications for Water Lines," a copy of which is attached as **Exhibit C** and incorporated by this reference.
- 5.4 District shall perform all preventive and corrective maintenance in a timely manner. If, in the opinion of, and upon a majority vote of, Authority Board of Directors, preventive or corrective maintenance has been unreasonably delayed, Authority shall so inform District. District shall respond within six (6) working days outlining the reason for delay. If Authority determines that the delay is within the control of District, District shall be so notified, and District shall complete the necessary work, if such work is material to the operation, within six (6) working days or by a date certain beyond six (6) days of notification with approval of Authority. If District fails to complete the work, Authority may terminate this Agreement or take steps to have the specific items of work which have not been performed completed by a third party. The cost of completing this work shall be deducted from any monies owing District by Authority.

- 5.5 District will utilize a CMMS system which provides: a record of repair and repair history for each piece of equipment or line section; control of preventive maintenance; monitoring of routine distribution line operations; monitoring of corrective maintenance programs; issuing of work orders; issuing of exception, equipment status, and repair reports.
- 5.6 For Authority properties containing Authority's Facilities, District shall water, mow, fertilize, prune, remove weeds, maintain and repair permanent sprinkler systems and controls, and otherwise maintain landscaping at Authority's Facilities so that it is at all times reasonably acceptable to Authority.
- 5.7 District shall maintain the appearance and cleanliness of all Authority buildings and structures in accordance with the generally accepted standards customary to the industry at all times, and shall provide those services normally associated with maintenance of water treatment facilities including snow removal.

## **ARTICLE 6 EMERGENCY MAINTENANCE EXPENDITURES**

District shall not obligate Authority to incur any expense for the acquisition of unplanned materials and equipment and third-party services in excess of \$60,000 per occurrence, except in case of emergencies, without prior approval, which may be given orally, by the President or Secretary of Authority, or other designated representative. Verbal requests by District and corresponding directives and approvals shall be followed up in writing at the earliest possible date after the expense is incurred. Authority agrees to include in its operating budget amounts for unscheduled repairs for each major cost center (i.e., water treatment and water distribution).

## **ARTICLE 7 ADMINISTRATION AND CAPITAL IMPROVEMENTS**

District shall provide qualified administrative and technical personnel who shall perform the following duties:

- 7.1 Assist Authority by providing information and recommendations on short and long-term facility needs for Authority's financial planning.
- 7.2 As appropriate prepare Requests for Qualifications (RFQ) and/or Requests for Proposals (RFP) for studies, plans and designs for new facilities, expansion, upgrades, rehabilitation, or repair.
- 7.3 Select qualified and cost-effective consultants for planning and design services.
- 7.4 Act as Authority's representative and agent for design and construction of facilities. Such services shall be included in the Basic Compensation provided for in Article 11.
- 7.5 Administer, as necessary, all Authority's present and future contracts.
- 7.6 Provide plan, record drawings and easement review and approval for new construction and modifications to the existing water distribution system. Review and respond appropriately to requests for encroachments into Authority easements.
- 7.7 Maintain records and plans, including as-built drawings, for all the Authority's Facilities, including both electronic copies and hard copies of such materials, when practicable.
- 7.8 Maintain a current and accurate set of 1/4 Section drawings of Authority's water system, using a GIS-based water mains mapping system.
- 7.9 Provide Authority with monthly operations and status reports at least 5 days prior to, and attend meetings for, Authority's Board of Directors, as needed. Reporting shall cover operations, capital

and special projects, finances, and other matters as directed by Authority. Authority and District shall develop mutually acceptable reporting forms and presentation formats.

- 7.10 Provide for emergency preparedness consisting of a centralized telephone number maintained to provide 24-hour response to emergencies such as interruption of water service because of system failures, line break, freeze-up or other mechanical problems. A copy of the Emergency and Mobilization Procedure is attached hereto as **Exhibit D** and incorporated herein by this reference.

## **ARTICLE 8 ACCOUNTING AND FINANCIAL**

District shall provide qualified accounting personnel at District Office in Vail, Colorado, who shall perform the following duties:

- 8.1 Maintain a general ledger and subsidiary journals for all transactions, which will be accounted for in accordance with Authority's policy and procedures, and which will be in accordance with and governed by generally accepted accounting principles for governmental entities.
- 8.2 Provide quarterly reports to the Board, including, but not limited to:
  - 8.2.1 Water Sales Summary;
  - 8.2.2 Budget Comparison of Revenue and Expenditures.
  - 8.2.3 Status of Annual Capital and Life Cycle Program.
- 8.3 Prepare an Annual Budget and review with Budget Committee prior to October or November budget hearing.
- 8.4 Maintain Authority bank accounts and invest excess cash in accordance with Authority's Investment Policy.
- 8.5 Prepare all annual financial statements and audit work papers. Coordinate completion of the audit and filing with the State Auditor by July 30 of each year.
- 8.6 Assist Authority in preparing and maintaining the operations budget, a report of budget variances and a summary of the maintenance costs and records.
- 8.7 In instances of cost sharing with third parties, collect the shared amounts from the other parties in a timely manner.
- 8.8 Recommend rate adjustments, as necessary and appropriate, to the Authority Board of the rates charged for water use and those related to new construction or remodeling of buildings in the Authority's Service Area, for consideration and approval of the Authority Board.
- 8.9 Manage outstanding debt program, ensure bond payments are made timely; coordinate issuance of new debt/bonds.

## **ARTICLE 9 BILLING AND CUSTOMER SERVICES**

District shall provide qualified personnel who shall perform services for monthly water service meter reading and billings subject to the following:

- 9.1 Water service billings shall be issued at the same time and in the same manner as sewer service billings.

- 9.2 The Authority Board shall adopt by resolution, Rules and Regulations in substantially the same form as the District has adopted and as such Rules and Regulations may be amended from time to time. All bills, which remain unpaid 28 days from the billing date, shall have a Late Charge of one percent (1%) per month of any Balance Forward added thereto, which Late Charge, when paid, shall be retained by District. Authority authorizes District to pursue all collection procedures outlined in Authority's Rules and Regulations, to include certification of eligible unpaid and past due amounts to the Eagle County Treasurer for collection as property taxes on Authority's behalf.
- 9.3 As shall be authorized in the Authority's Rules and Regulations, the Authority acting through District personnel, may discontinue water service to customers whose account is past due following notice of disconnection to such customers as provided in the Authority's Rules and Regulations.
- 9.4 In the event a customer's service is unable to be discontinued, District will contract the work to correct any system deficiencies so that the customer's water service is able to be discontinued. The cost of such work may be added to the customer's billing as an adjustment.
- 9.5 Approximately one month after the end of each billing period, District shall remit to Authority, an amount equal to the total water services billed, less all amounts due from customers, which have any amounts in Balance Forward on their bills, which have remained unpaid for more than one hundred twenty (120) days.
- 9.6 District shall provide meter read verifications and respond to requests for service turn-on/shut-off within two days.

## **ARTICLE 10 PERFORMANCE REVIEW**

At the request of the Authority Board, Authority may conduct formal written performance reviews of District. Two (2) performance reviews may be performed, one at the end of six (6) months, and the second in the eleventh (11) month of the Agreement. Authority will provide a copy of the performance reviews to District and schedule a meeting to review the findings with District. If at any time, however, Authority determines that performance has not been in compliance with the provisions of this Agreement, Authority will establish remedial steps for District to gain compliance with the Agreement. If District fails to initiate necessary remedial actions within five (5) working days; Authority shall have sufficient grounds to terminate the Agreement as specified herein.

## **ARTICLE 11 COMPENSATION**

- 11.1 Authority agrees to pay District the actual cost of providing services. For the services included in the Scope of Services above, an estimated fee of \$7,425,000 shall be paid in monthly payments of \$618,750 as an estimate of Basic Compensation as the phrase is used herein. The determination of the amount of actual Basic Compensation due to District shall be accomplished through an end-of-year audit of District by its independent auditor. The difference of actual versus estimated Basic Compensation shall be paid to the other party within 30 days of acceptance of the District audit by District Board.
- 11.2 Basic Compensation, for 2023, shall be calculated as follows and is set forth in **Exhibit E**:
- 11.2.1 Personnel Costs shall include wages and benefits and shall be determined as follows:
- For Customer Service and Laboratory personnel, Authority's portion of direct personnel costs shall be that portion of total customer service and laboratory personnel costs for the District employees performing those functions multiplied by the percentage determined

by dividing the number of Authority accounts serviced by the District by the total number of Authority accounts and water and sanitation accounts serviced by the District.

- b. For all other departments, personnel costs shall be determined by an analysis of time sheets for the twelve (12) month period ending the previous December 31 adjusted for non-routine services provided to Authority on a time-and-material basis.

- 11.2.2 Vehicle Costs shall include but not be limited to the cost for annual fuel, repair and maintenance, vehicle replacement (by use of annual depreciation expense), and insurance. The total vehicle cost shall be allocated between District and Authority on the basis of 70% to the District and 30% to the Authority. This allocation represents the cost and mileage driven within the parties' service areas.
- 11.2.3 Overhead Costs applicable to Authority shall be allocated between District and Authority on the basis of direct personnel costs for each, over the previous twelve (12) month period.
- 11.2.4 Life Cycle, Replacement and Upgrade Costs represent the cost sharing of improvements to IT equipment, by District, which are not associated with Authority treatment, distribution facilities or SCADA systems. This allocation of costs will be reported with specificity as to fairness and reviewed and approved by Authority Audit Committee.
- 11.2.5 Other Services provided by District shall be billed at rates listed in **Exhibit B** or for amounts agreed to by District and Authority. Tests performed by District Laboratory shall be billed in accordance with the price per sample listed in Exhibit F.

## **ARTICLE 12 INSPECTION AND AUDIT**

Authority reserves the right to enter on any of the facilities covered by this Agreement at any time to observe, inspect or audit any of District's operations, activities, or financial and operating records. Authority agrees to comply with District's operating and safety procedures when entered on any of the facilities covered by this Agreement.

## **ARTICLE 13 SPECIAL CONDITIONS**

- 13.1 Insurance Requirements. At all times during the term of this Agreement, District shall carry and maintain in full force, at District's expense, the following insurance coverage. Such policies shall include a provision requiring a minimum of thirty (30) days' notice to Authority of substantial change or cancellation of coverage or insurance policies.
  - 13.1.1 General Comprehensive Liability insurance in an amount of \$350,000 per person and \$990,000 per occurrence, including the following coverage: property damage; underground explosion and collapse hazard; and personal injury.
  - 13.1.2 Comprehensive Automobile Liability insurance on all owned vehicles used in connection with the services in an amount of \$350,000 per person and \$990,000 per occurrence combined single limits for bodily injury and property damage.
  - 13.1.3 Workers' Compensation insurance in accordance with the provisions of the Workers' Compensation Act of the State of Colorado for all employees to be engaged in the Services.

- 13.2 Certificates of Insurance. Prior to commencement of Services, District shall provide Authority with Certificate(s) of Insurance evidencing the insurance required by this Article and naming Authority as an additional named insured as its interest may appear for all Comprehensive General Liability insurance.
- 13.3 Indemnity. To the extent of the limits of any insurance coverage maintained by District, District further agrees to indemnify and hold Authority harmless from, and defend all actions against, all claims, damages, losses and expenses, including, but not limited to, attorneys' fees arising from any negligent act or omission on the part of District, its agents, or employees, provided, however, that any claim for negligent acts or omissions must be brought in accordance with and subject to the limitations of the Colorado Governmental Immunity Act, C.R.S. 24-10-101, et. seq., as amended, as the same may now or hereafter exist, and nothing herein shall be deemed or construed to be a waiver of the rights granted thereunder. Authority shall provide District with notice of the commencement of any action, subject to this paragraph, not more than five (5) days following receipt by Authority of notice of commencement of such action.
- 13.4 Renegotiation. Duties or services to be performed by District may be added or deleted and charges for services may be renegotiated by either party upon thirty (30) days' written notice to the other party.
- 13.5 Assignment. No assignment of rights and/or obligations shall be made by either party without the express written consent of both parties.
- 13.6 Term of Agreement. The effective date of this Agreement shall be January 1, 2023, and it shall extend for a period of twelve (12) months, ending December 31, 2023. This Agreement shall be automatically extended for additional successive one (1) year periods with no notice required to either party unless either party provides written notice of its intent not to extend the Agreement at the end of the current term and to terminate the Agreement at the end of the current term not later than three (3) months prior to the end of the current term of the Agreement. Annually, **Exhibits A, B, E and F** shall be updated for the extended term by District Staff and copies of such updated Exhibits shall be provided to the Authority Board for approval as part of the Authority's Budget process for the next calendar year.

#### **ARTICLE 14 TERMINATION**

- 14.1 This Agreement may be terminated without cause by either party upon giving to the other party three (3) months written notice in advance of the date upon which the termination becomes effective.
- 14.2 In the event of any emergency condition involving the water facilities and systems which is found by Authority to endanger the public health, whether caused by District or otherwise, and District is either unable or unwilling to correct such condition, Authority may terminate without notice this Agreement during the emergency condition, provided that at the conclusion of any such condition, the Agreement may be reinstated subject to paragraph 14.1 above.
- 14.3 If this Agreement is terminated by Authority or District, District shall furnish the services necessary to continue normal operations for a period of sixty (60) days after the termination date. This period will commence only at Authority's request, for the purpose of training and assisting new employees of Authority or its new contractor in the management and operation of Authority's Facilities. In such event, Authority shall pay to District currently existing compensation for said sixty (60) days.

#### **ARTICLE 15**

## AMENDMENT

This Agreement may be amended by the adoption of written Appendices which are mutually agreed to by the parties.

### ARTICLE 16 MISCELLANEOUS

- 16.1. Entire Agreement. This Agreement constitutes the entire Agreement between the parties hereto relating to the services, and sets forth the rights, duties, and obligations of each to the other as of this date. Any prior agreements, promises, negotiations, or representations not expressly set forth in this Agreement are of no force and effect. This Agreement may not be modified except by a writing executed by both parties.
- 16.2. Binding Agreement. This Agreement shall inure to and be binding upon the parties, their successors, and assigns.
- 16.3. No Waiver. No waiver of any of the provisions of this Agreement shall be deemed to constitute a waiver of any other of the provisions of this Agreement, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided herein, nor shall the waiver of any default hereunder be deemed a waiver of any subsequent default hereunder.
- 16.4. Controlling Law. This Agreement shall be governed by and construed in accordance with the law of the State of Colorado.
- 16.5. Subject to Annual Appropriation and Budget. Under no circumstances shall this Agreement constitute, or be considered as, a multiple-fiscal year obligation of either the District or the Authority. The Authority's and the District's obligations under this Agreement exist subject to annual budgeting and appropriations and shall remain subject to the same for the entire term of this Agreement.
- 16.6. Governmental Immunity. Nothing in this Agreement shall be construed to constitute a waiver, in whole or in part, of any of either of the parties' rights and protections under the Colorado Governmental Immunity Act, § 24-10- 101, et seq., C.R.S., as amended from time to time.
- 16.7. No Third-Party Beneficiaries. It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to the parties and nothing contained in this Agreement shall give or allow any such claim or right of action by any other third party on such Agreement. It is the express intention of the parties that any person other than parties receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.
- 16.8. Counterpart Execution. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals as of the day and year first above written.

EAGLE RIVER WATER & SANITATION DISTRICT

By: \_\_\_\_\_  
President

ATTEST:

By: \_\_\_\_\_  
Secretary



UPPER EAGLE REGIONAL WATER AUTHORITY

By: \_\_\_\_\_  
President

ATTEST:

By: \_\_\_\_\_  
Secretary

**EXHIBIT A  
2023 UERWA CAPITAL BUDGET**

**Carryforwards by Project**

<b>Fund Type</b>	<b>Department</b>	<b>Project Name</b>	<b>Estimated Carryforward</b>	<b>Description</b>
Bond	Engineering	20-1-2-00-00-136 Bolts Lake Reservoir	297,229	Timing of invoices for major geotechnical investigation and water court
Capital	Engineering	20-1-2-00-00-994 Reservoir Storage Master Plan	13,699	Ongoing water rights billings
Bond	Field Ops	20-1-2-00-00-138 CRP-Arrowhead Transmission Main Rehab	1,301,104	Project delayed one year to investigate and design alternate alignment
Capital	Field Ops	20-1-2-00-20-100 Beaver Creek BPS3 Rehabilitation	56,400	Project held in order to combine all 3 Beaver Creek pump stations into one project
Bond	Ops	20-1-2-00-00-469 RTU System Upgrade	200,000	Project complete, remaining budget is for internal retrofit work
Bond	Water	20-1-2-00-00-039 CRP-Fenno Well House/Raw Wtr Conveyance	750,000	2022 Budget contemplated major work at well heads, 2022 work was investigation and easement acquisition
Capital	Water	20-1-2-00-00-135 Water System Emergency Power	147,587	Project dependent on Emergency Response Plan
Capital	Water	20-1-2-00-30-300 Cordillera East1 (Teacup) Tank Expansion	57,857	Project deferred to 2024/25 as control modifications addressed overflow issues
CRP	Water	20-1-2-00-00-044 CRP-ADWF Domestic Lift Station Rehabilitation	80,000	Project delayed due to vendor and supply issues

### Projects by Department

Department	2022 Budget	2022 Projection	2023 Budget	YOY Budget Var
Engineering	100,000	86,301	25,000	(75,000)
Field Ops	990,868	803,330	375,000	(615,868)
Finance	515,000	515,000	566,500	51,500
Human Resources	-	-	10,000	10,000
IT	20,000	-	5,000	(15,000)
Ops Tech	-	581	10,000	10,000
Water	985,445	579,656	1,525,033	539,588
<b>Total</b>	<b>2,611,313</b>	<b>1,984,867</b>	<b>2,516,533</b>	<b>(94,780)</b>

### Major Capital Projects

Fund Type	Project Name	2023 Budget	Total Project Budget
Bond	Bolts Lake Reservoir	\$425,000	\$66,449,223
Bond	CRP- Wildridge BPS and PRV Improvements	\$2,880,000	\$5,000,000
Bond	CRP-Arrowhead Transmission Main Rehab	\$700,000	\$2,350,000
Bond	CRP-Upgrade PLC 6 @ ADWF-Master PLC	\$1,500,000	\$2,966,245
Capital	Water Treatment Master Plan	\$133,333	\$333,333

**EXHIBIT B: 2023 FEE SCHEDULE FOR DISTRICT EQUIPMENT AND PERSONNEL**

Equipment\Labor	In District Hourly Rates	Out of District Hourly Rates
1 Ton Utility, Duramax	\$52.00	\$62.00
3" Pump	\$29.00	\$35.00
6" Power Prime Pump Trailer	\$58.00	\$69.00
Air Compressor (180 cfs)	\$23.00	\$28.00
Asphalt Cutter	\$35.00	\$42.00
Backhoe, John Deere #710 (1-1/2 cy, 3/8 cy Hoe)	\$87.00	\$104.00
Camera Locator	\$58.00	\$69.00
Camera Water or Sewer	\$208.00	\$249.00
Chain Saw	\$29.00	\$35.00
Composting Auger	\$35.00	\$42.00
Correlator-DigiCorr	\$92.00	\$111.00
Correlator-Zcorr	\$46.00	\$55.00
Demo Saw	\$29.00	\$35.00
End Dump Trailer	\$75.00	\$90.00
Fire Pump Truck	\$139.00	\$166.00
Fork Lift	\$46.00	\$55.00
Front Loader	\$87.00	\$104.00
Generator	\$58.00	\$69.00
Generator-Portable	\$40.00	\$49.00
Hoe/Pack Compactor	\$87.00	\$104.00
Jack Hammer and Hydraulic unit # 105 (1 ton)	\$52.00	\$62.00
Large Jetting Truck	\$127.00	\$152.00
Light Plant (mobile)	\$58.00	\$69.00
Lowboy Tractor	\$75.00	\$90.00
Lowboy Trailer	\$69.00	\$83.00
Message Boards	\$29.00	\$35.00
Meter Test Bench	\$46.00	\$55.00
Mikasa Jumping Jack	\$52.00	\$62.00
Mini Excavator	\$87.00	\$104.00
Pickup with Plow	\$52.00	\$62.00
Pickup with Plow & Liftgate	\$52.00	\$62.00
Rock Breaker/Hammer	\$173.00	\$208.00
Skid Steer	\$69.00	\$83.00
Skid Steer w/ Blower or Brush	\$92.00	\$111.00
Small Dump Truck	\$40.00	\$49.00
Small Jetting Truck	\$116.00	\$139.00
Small Portable Welder	\$23.00	\$28.00

Snowblower-Manual	\$17.00	\$21.00
Steamer	\$23.00	\$28.00
Tandem Dump Truck	\$58.00	\$69.00
Trench box Trailer	\$60.00	\$74.00
TV Van	\$116.00	\$139.00
Utility Trailer	\$35.00	\$42.00
Valve Box Cleaner	\$23.00	\$28.00
Valve Box Operator/Cleaner	\$40.00	\$49.00
Valve Maintenance Trailer	\$75.00	\$90.00
Vehicle & Tools	\$40.00	\$49.00

Equipment\Labor	In District Hourly Rates	Out of District Hourly Rates
LABOR: Construction Managers, Planning Supervisors, Project Engineers	\$89.00	\$107.00
LABOR: General Manager	\$201.00	\$241.00
LABOR: Executive Manager	\$155.00	\$186.00
LABOR: Field Operations Personnel	\$61.00	\$74.00
LABOR: Managers	\$110.00	\$132.00
LABOR: Office Administration & Accounting Staff	\$72.00	\$86.00
LABOR: Operational Interns/Temps	\$23.00	\$28.00
LABOR: Operations Supervisors and Field Operations Leads & Planners	\$101.00	\$123.00
LABOR: Water & Wastewater Operations Personnel	\$58.00	\$70.00

**EXHIBIT C**

The current form of **STANDARD SPECIFICATIONS FOR WATER LINES** for District are incorporated into this Agreement by this reference.

**EXHIBIT D**

**EMERGENCY AND MOBILIZATION PROCEDURE**

1. In case of an emergency during normal working hours, Monday through Friday, 8:00 a.m. – 5:00 p.m., call (970) 476-7480, and personnel will be radio dispatched.
2. In case of an emergency during off-duty hours, weekends and holidays, call (970) 476-7480 and an answering service operator will contact the appropriate on-call personnel by telephone or pager.
3. District will have personnel on-call during off-duty hours, weekends and holidays who will respond to the emergency.
4. When the on-call personnel arrive at the location of the emergency, they will determine the following:
  - a. Is the emergency an Authority or customer responsibility?
    - 1) If the emergency is a customer responsibility, they will inform the customer that it is the customer's responsibility and offer recommended solutions, as appropriate.
    - 2) If the emergency is an Authority responsibility, they will determine which of the following steps to take:
      - a) Notify Supervisor of the problem and proceed to correct the problem that caused the emergency.
      - b) Call out additional personnel to assist as necessary.
      - c) Call for equipment, if needed.
      - d) Call other utility companies for emergency line locations, Fire Department, residences if needed.
  - b. Time and material to determine the cause of the emergency shall be included in the Basic Compensation provided for in Article 11. If the emergency is determined to be an Authority responsibility, time and material will be charged to Authority in accordance with paragraph 11.2.5. If the emergency is determined to be a customer responsibility, time and material will be charged to the individual customer for any services provided after this determination is made.

**EXHIBIT E**  
**2023 BASIC COMPENSATION**

<b>Total Cost for the Treatment, Distribution, CIP, Admin &amp; Accounting services and Life Cycle Replacements:</b>		
	<b>2022</b>	<b>2023</b>
	<b><u>Estimate</u></b>	<b><u>Budget</u></b>
Salaries and Benefits	4,714,767	5,242,810
Overhead cost allocation	1,165,233	1,200,190
Vehicles	125,000	135,000
IT Tech upgrades allocation	255,000	280,500
<b>Total</b>	<b>6,235,000</b>	<b>6,858,500</b>
CIP Management cost to be capitalized	515,000	566,500
<b>Total ops agreement cost estimate</b>	<b>6,750,000</b>	<b>7,425,000</b>
<b>Billed Monthly</b>	<b>562,500</b>	<b>618,750</b>
Compensation will be adjustment to final audited Amount.		



**EXHIBIT F**  
**2023**  
**LABORATORY PRICE LIST FOR UERWA (IN-DISTRICT)**

Test	Method	Matrix	Cost
Alkalinity, Total	SM 2320B	Wastewater and Drinking Water	\$18.00
Biochemical Oxygen Demand	SM 5210B	Wastewater	\$55.00
Chlorine (DPD Residual)	SM 4500-Cl G	Wastewater and Drinking Water	\$15.00
Chemical Oxygen Demand	SM 5220D	Wastewater	\$34.00
Conductivity	SM 2510A	Wastewater and Drinking Water	\$10.00
E. coli MPN	SM 9223	Wastewater and Drinking Water	\$30.00
Total Coliform and E. coli MPN	SM 9223	Wastewater and Drinking Water	\$40.00
Hardness	SM 2340C	Wastewater and Drinking Water	\$22.00
Heterotrophic Plate Count	SM 9215B	Drinking Water	\$22.00
Nitrogen, Ammonia	SM 4500-NH3E	Wastewater	\$20.00
Nitrogen, Nitrate + Nitrite	SM 4500-NO3F	Wastewater	\$15.00
Nitrogen, Total	Lachat Method 10-107-04-4-A	Wastewater	\$30.00
pH	SM 4500-H+B	Wastewater and Drinking Water	\$20.00
Simplified, TKN	Hach TNT 880	Wastewater	\$30.00
Solids, Total Dissolved	SM 2540C	Wastewater and Drinking Water	\$25.00
Solids, Total Suspended	SM 2540D	Wastewater and Drinking Water	\$20.00
Solids, Total	SM 2540B	Wastewater	\$20.00
Solids, Total Suspended + Volatile Suspended	SM 2540D and SM 2540G	Wastewater and Drinking Water	\$30.00
Sulfate	EPA 375.4	Wastewater and Drinking Water	\$20.00
Total Coliforms - presence/absence (BacT Sample)	SM 9223B	Drinking Water	\$25.00

Phosphorus, Reactive (Ortho)	SM4500-P E (Hach 843, 844, 845)	Wastewater	\$15.00
Phosphorus, Reactive (Ortho)	Lachat Method 10-115-01-1-M	Wastewater	\$25.00
Phosphorus, Total	SM4500-P E (Hach 843, 844, 845)	Wastewater	\$15.00
Phosphorus, Total	Lachat Method 10-115-01-1-F	Wastewater	\$30.00
<b>Late fees (This additional cost applies to samples not received during the time period requested)</b>	<b>Accepted sample drop off times/days</b>	<b>Matrix</b>	<b>Cost</b>
Total Coliforms - presence/absence (BacT Sample)	7:00 am to 3:00 pm (Monday-Thursday)	Drinking Water	\$6.00
Solids, Total Dissolved	First two weeks of the month (Monday or Tuesday ONLY)	Wastewater and Drinking Water	\$24.00
E. coli MPN and Total Coliform plus E. coli MPN	Before 9:00 am	Wastewater and Drinking Water	\$18.00
	(Monday, Tuesday, or Thursday)		

NOTE: Prices are subject to change and do not include shipping  
Samples that are sent to contract laboratories will be charged the contracted laboratory prices.



1155 CANYON BOULEVARD, SUITE 110, BOULDER, CO 80302  
OFFICE: 303-449-2834 FAX: 720-535-4921  
SOMACHLAW.COM

## **MEMORANDUM**

**TO:** Upper Eagle Regional Water Authority Board of Directors  
**FROM:** Kristin Moseley  
**SUBJECT:** Upper Eagle Regional Water Authority Resolution on Water Dedication Policy for 2023  
**DATE:** November 9, 2022

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Attached for your consideration is a revised version of the Upper Eagle Regional Water Authority Resolution on Water Dedication Policy for 2023, which incorporates the changes discussed at the October board meeting. As you will note, we have eliminated the summer and winter tiered rates and included a fixed rate of \$66,063 per acre foot of water based on anticipated costs of construction of Bolts Lake. We have also included a new provision in paragraph 4(C) describing a Conditional Capacity to Serve Letter that also requires a 25% deposit from Developers.

**UPPER EAGLE REGIONAL WATER AUTHORITY  
RESOLUTION ON  
WATER DEDICATION POLICY**

**Effective January 1, 2023**

**WHEREAS**, the Upper Eagle Regional Water Authority (“Authority”) is a quasi-municipal entity authorized and empowered to supply water for domestic and other public and private purposes; and

**WHEREAS**, the Authority’s mission is, among other goals and responsibilities, to provide efficient, effective, and reliable water to its service area, ranging from Eagle-Vail through Cordillera; and

**WHEREAS**, extensive redevelopment is occurring in the Authority’s service area and such redevelopment is increasing the existing development density and water uses associated with certain redevelopment properties; and

**WHEREAS**, new development and water uses are occurring within the Authority’s service area; and

**WHEREAS**, the Authority may expand its boundaries and commit to serve properties not currently within its service area; and

**WHEREAS**, to accommodate the increase in water demands caused by redevelopment projects and new water uses within or outside its current service area, and to continue to provide efficient, effective, and reliable water to its service area as it may from time to time be expanded, the Authority seeks to establish a uniform water dedication policy for third-party developers seeking (i) increased water service for the redevelopment of property within the Authority’s service area or seeking new water service for properties not covered by existing taps or zoning, or (ii) water service for properties not currently within the Authority’s service area (“Developers”); and

**WHEREAS**, such water dedication policy needs to protect the general welfare of the residents in the service area.

**BE IT RESOLVED,**

1. **GENERAL POLICY.** The Authority adopts the general policy of conditioning certain water service upon either a dedication of water rights or a payment of cash in lieu of water rights. This general policy shall apply (A) to all new development or redevelopment within its service area that will require an increase in water use or a new water use not covered by existing taps or zoning, and (B) to all properties not currently within the Authority’s service area. For any redevelopment, this condition applies only to the difference between the projected increased water demand and the pre-redevelopment water demand. For example, if the pre-

redevelopment demand for a particular parcel of property is five consumptive acre-feet and the projected redevelopment water demand will increase demand to six consumptive acre-feet, the increase of one consumptive acre-foot will be subject to this water dedication policy. The increase may be as a result of increased density, increased landscaping, or any other change in use of the property that increases the water demand from the pre-redevelopment demand. There may also be situations where the water rights dedication or payment of cash in lieu is based on the diversion demand, not just the consumptive use of the water demand.

2. **DEDICATION OF WATER RIGHTS.** The dedication of water rights must provide the Authority with a dependable legal supply of water equal to one hundred and twenty percent (120%) of the water rights necessary to service the new or increased water requirements associated with the new development or redevelopment, or property not currently within the Authority's service area. Using the example in Paragraph 1, if the Authority agrees to accept a dedication of water rights, the Developer would be required to supply a dependable legal supply of water in the amount of 1.2 consumptive acre-feet (120% of the increase in demand of one acre-foot). All water dedication agreements or contracts between Developers and the Authority that provide water rights to the Authority under this policy shall be at the discretion of the Authority.

To the extent the Authority determines to accept a dedication of water rights, the following criteria shall be used in determining the type of water rights to be dedicated:

- (A) Shares of stock in the Eagle Park Reservoir Company representing the right to the annual release of water from Eagle Park and/or Homestake Reservoirs.
- (B) Water rights that could be used to enhance the yield of Eagle Park Reservoir.
- (C) Interests in consumptive use credits that are already decreed for diversion and use at the Authority diversion points.
- (D) Imported/transbasin water that is available for use in the Colorado River basin upstream of the Shoshone Power Plant.
- (E) Other water rights that can be integrated into the Authority's water system or used to enhance existing exchanges without significant expense.
- (F) All dedicated water rights must be owned in fee and cannot be based on a leasehold interest.
- (G) There shall be a preference for in-basin or imported water.
- (H) Only water rights senior to the 1922 Colorado River Compact shall be accepted.

3. **CASH IN LIEU OF WATER RIGHTS.** All water dedication agreements or contracts between Developers and the Authority that provide cash in lieu of water rights under this policy shall be at the discretion of the Authority, and shall be subject to the following additional conditions:

(A) The Authority has sufficient water rights to meet the new water service obligation.

(B) The Developer does not have access to the type of water rights that meet the Authority's criteria for acceptance of water rights.

(C) The water rights appurtenant to the land to be served have been previously severed.

(D) Cash payments based on 120% of the projected new or increased water use shall be valued based on the current market value of firm annual yield of in-basin storage, for example Eagle Park and Homestake Reservoirs, but shall not be less than the amount set forth on the attached Exhibit A.

(E) Cash payments shall be paid to the Authority to be used, at the discretion of the Authority, to develop and/or acquire additional in-basin or imported/transbasin water supplies for the Authority.

Notwithstanding the foregoing provisions of Paragraph 3(D) regarding the percentage of the amount of the cash in lieu fee, the Authority may choose in its sole discretion to reduce the percentage of the cash in lieu fee to an amount less than 120% where the Developer provides evidence acceptable to the Authority that the landscape design and water use fixtures of the development provide efficiencies that demonstrate a water use that is less than the Authority's projected new or increased water use that is used to calculate the cash in lieu fee; provided, however, in no event shall the cash in lieu fee be less than 100% of the amount of the projected new or increased water use.

The Authority may also choose in its sole discretion to eliminate any cash in lieu fee for the portions of a Developer's property that require the temporary irrigation of native grasses or trees for a period of a maximum of two years if the temporary irrigation is metered separately from other water uses on the property and billed at the Authority's irrigation rate.

4. **PAYMENT OF COSTS.** All payment of costs regarding water dedication agreements or contracts between Developers and the Authority under this policy shall be subject to the following conditions:

(A) In addition to the dedication of water rights under Paragraph 2 or cash payments under Paragraph 3(D), Developers shall be required to pay the Authority for all legal, engineering, and other costs incurred or which may be incurred by the Authority to evaluate and/or adjudicate any augmentation plan or other water court application, if necessary, to provide new or increased water service to any Developer's property.

(B) Where an engineering or legal evaluation is required by the Authority to implement the terms of this Policy, the Developer will be required to deposit with the Authority an initial fee of no less than \$5,000 to pay for the cost of such evaluation. The initial deposit shall be used to pay the costs of staff, legal consultants, engineering consultants, and other expenses that may be incurred by the Authority. These costs are separate and distinct from any other Tap Fees and other charges applicable to the development. This cost reimbursement charge is not related or credited to any other fee or the Authority. Deposit amounts in excess of the actual cost of the analysis will be refunded to the proponents of the development. A good faith effort will be made to generally account for the costs incurred, but the Authority shall not be obligated to provide a specific accounting of costs, but only a generalized estimate.

(C) Developers requiring an Ability to Serve Letter, as defined in **C.R.S § 29-20-304**, as evidence of sufficient water rights from the Authority for a land use permit application shall pay a refundable cash in lieu deposit to the Authority that is equal to twenty-five percent (25%) of the estimated cash payment under Paragraph 3(D). Following the receipt of such cash in lieu deposit, the Authority will issue a Conditional Capacity to Serve Letter to the relevant government authority that demonstrates the Authority will serve the project once certain conditions have been met, including the payment in full of cash in lieu fees. The cash in lieu deposit will be credited toward the final cash in lieu fee payment, which shall be calculated at the the current value of water rights set forth in Paragraph 3(D) at the time of payment of the full cash in lieu fees. Following the payment in full of cash in lieu fees and the execution of a Water Service Agreement, the Authority will provide the Developer with an Ability to Serve Letter as defined in **C.R.S § 29-20-304**. In the event water service is no longer required or desired for the Developer's property, any refund of the cash in lieu deposit shall be paid within 120 days written notice to the Authority. Any unpaid reimbursement costs described in Paragraphs 4(A) and (B) above owed to the Authority shall be withheld from the refund. The Authority will not refund a cash in lieu deposit once the property to which water service has been extended has obtained land use approval unless such land use approval is revoked or otherwise terminated by the relevant governmental authority.

(D) In the event water service is no longer required or desired for Developer's property, any refund of cash in lieu payment previously paid shall be at the sole discretion of the Authority. Where the Authority decides in its sole discretion to refund a cash in lieu payment, the Authority may charge a cancellation fee. The Authority will not refund a cash in lieu payment once the property to which water service has been extended has obtained land use approval unless such land use approval is revoked or otherwise terminated by the relevant governmental authority.

5. **APPLICABILITY OF POLICY.** Upon the referral from the Town of Avon or Eagle County for an ability to serve commitment, the Authority staff shall determine whether this policy is applicable to any property that is currently within the Authority's service area and that is being developed or redeveloped.

Approved this 17<sup>th</sup> day of November, 2022.

UPPER EAGLE REGIONAL WATER AUTHORITY

By: \_\_\_\_\_  
George Gregory, Chair

ATTEST:


By: \_\_\_\_\_  
Kim Bell Williams, Secretary



**Exhibit A**

The cash in lieu payment under paragraph 3(D) of the Water Dedication Policy shall not be less than sixty-six thousand sixty-three dollars (\$66,063) per consumptive acre foot of water.



ERWSD New Development Report								
November 2022								
		Type of Use	SFEs Proposed	Location	Existing Service Commitment?	Augmentation Requirement	Development Approval Process Step:	Construction Approval Process Step:
	534 E Lionshead Circle - Elevation	Residential	12	Vail	No	0.49	2. Water Analysis	0. Conceptual
	500 E Lionshead Circle - Legacy	Residential	23	Vail	No	0.31	2. Water Analysis	2. Plan Approval
	Alura (Miradoro)	Residential	10	Vail	No	0.83	1. Connection Application	2. Plan Approval
	Belden Place (1200 Block Main St)	Residential	41	Minturn	Yes		N/A	2 Plan Approval
	Booth Heights	Residential	61	Vail	No	TBD	1. Connection Application	0. Conceptual
	Highline (Double Tree Expansion)	Residential	43.65	Vail	No	0.79	6. Ability to Serve Letter	1. Plan Review
	Midtown Village PUD	Res + Com	43.55	Minturn	Yes		1. Connection Application	1. Plan Review
	North Minturn PUD	Residential	184	Minturn	Yes		N/A	1. Plan Review
	The Residences at Main Vail	Residential	72	Vail	No	0.81	6. Ability to Serve Letter	2. Plan Approval
	S. Frontage Rd Roundabout	Infrastructure	N/A	Vail	Yes		N/A	2. Plan Approval
	Vail Mountain View Phase II	Mixed Use	37	Vail	Yes		6. Ability to Serve Letter	N/A
	VVMC Phase II-East Wing	Commercial	--	Vail	Yes		N/A	2. Plan Approval
	Vail Marriott Residence Inn	Mixed Use	75	Vail	Yes		N/A	2. Plan Approval
	Wolcott PUD	Mixed Use	328 + Com	Wolcott	No	TBD	0. Conceptual	0. Conceptual
	Projects Completing Warranty Period							
	3010 Basingdale (Phase II), 841/851 Main St Minturn, Red Sandstone Parking Garage							
Process	Construction Approval Process Steps:	0. Conceptual		1. Plan Review	2. Plan Approval	3. Acceptance	4. Warranty Period	5. Final Acceptance
	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	6. Ability to Serve Letter



## BOARD COMMITTEES

### DISTRICT

<i>Audit/Budget</i>	Dick Cleveland Steve Coyer
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<i>Employee Housing</i>	Steve Coyer Dick Cleveland
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<i>Retirement Plans</i>	Bob Warner Linn Brooks David Norris
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<i>Organizational Development</i>	Bob Warner Dick Cleveland
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<i>Facilities Master Plan</i>	George Gregory Bob Warner
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### JOINT

<i>Water Quality</i>	Sarah Smith Hymes (A) Timm Paxson (D)
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<i>Rules and Regulations</i>	Kim Bell Williams (A) Bob Warner (D)
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<i>Water Supply Planning</i>	Sarah Smith Hymes (A) Mick Woodworth (A) Kate Burchenal (D) Steve Coyer (D)
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<i>Climate Action Plan</i>	Sarah Smith Hymes (A) Kate Burchenal (D) Timm Paxson (D)
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(A) = Authority, (D) = District

### AUTHORITY

<i>Audit/Budget</i>	Geoff Dreyer George Gregory
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**UPPER EAGLE REGIONAL  
WATER AUTHORITY**

**GOVERNED BY:**

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

The Town of Avon

**MEMORANDUM**

**TO:** Board of Directors  
**FROM:** Brian Thompson, Government Affairs Administrator  
**DATE:** November 10, 2022  
**RE:** Summary of Authority's Oct. 27, 2022, Board Meeting

The following is a summary of items discussed at the Authority's Oct. 27, 2022, Board Meeting.

Directors present and acting were Chair George Gregory, Vice Chair Sarah Smith Hymes, Secretary Kim Bell Williams, Treasurer Geoff Dreyer, and Mick Woodworth. Alternate Director Mike Towler was present and acting. Director Kevin Hillgren was present but not acting.

<b>Approval of minutes</b>	Directors approved the September 22, 2022, regular meeting minutes.
<b>Consideration of weather modification program participation</b>	Directors supported contributing \$15,000 to the Central Colorado Mountains River Basin Weather Modification as budgeted for the 2022-23 winter season and then reevaluating future participation.
<b>Unification of Authority and District</b>	Directors discussed the process and potential issues related to full unification and partial unification where Authority member entities would include into the District.
<b>2023 Budget Work Session</b>	Directors reviewed the proposed FY 2023 budget and supported holding a public hearing on the budget as presented at its Nov. 17 meeting.
<b>Water Dedication Policy Work Session</b>	Jason Cowles described how the policy works as developers go through the land use entitlement process. Directors supported adding a provision requiring a deposit for conditional commitment of water rights, increasing cash-in-lieu fees for summer and winter water, and revising the provision requiring dedication of 120% of the water rights necessary for service. The Board agreed to vote on an amended policy at its Nov. 17 meeting.
<b>Wildridge Water Tank</b>	Brad Zachman reported on an oil sheen identified in a Wildridge tank, likely associated with a contracted tank inspection process. Sampling of residual amounts did not raise any public health concerns and staff reported it to the Colorado Department of Public Health and Environment.
<b>Unallocated Water</b>	Jason Cowles said the Authority has about 52-acre feet of unrestricted Eagle Park Reservoir water remaining for development. The amount could change as a better understanding of remaining unallocated water will be available after modeling is completed.

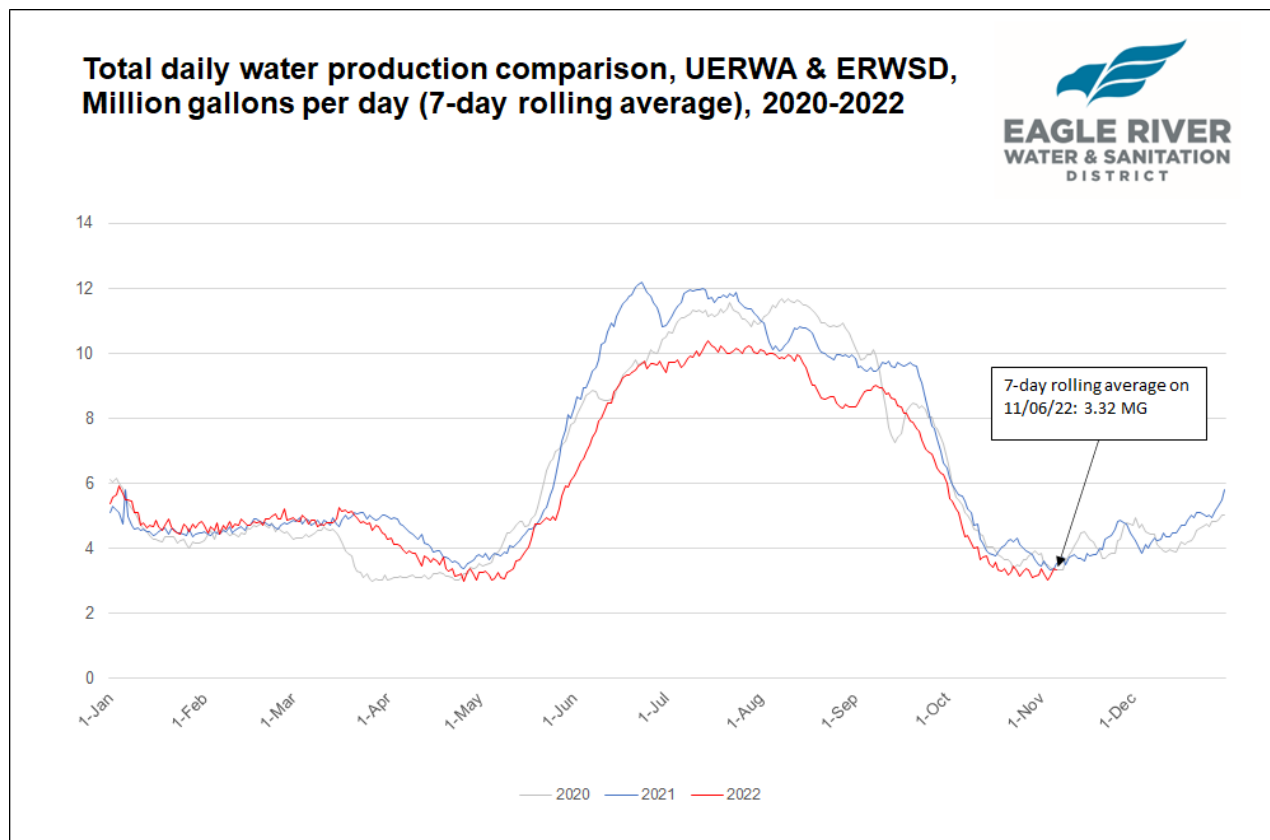


## OPERATIONS MONTHLY REPORT NOVEMBER 2022

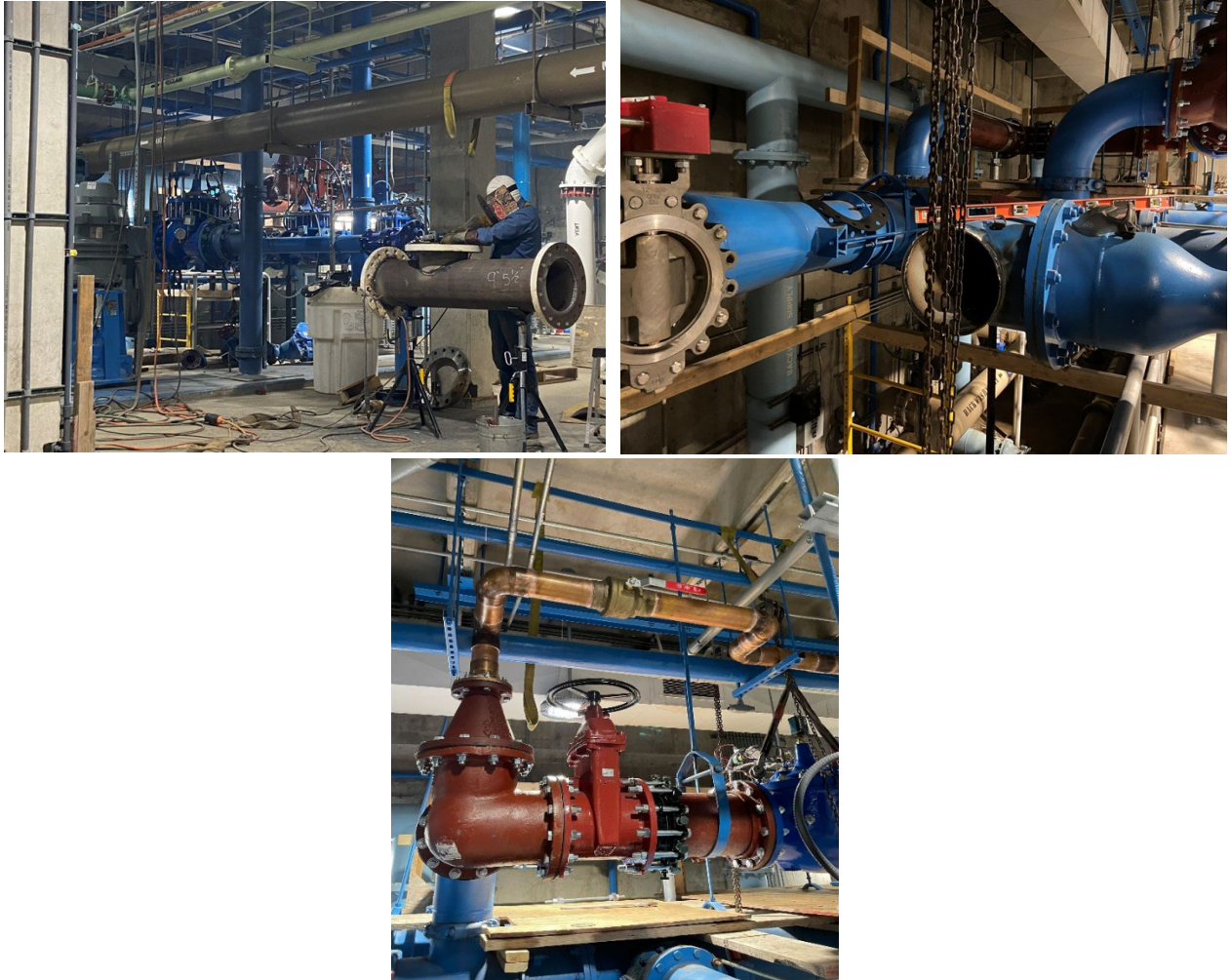
### WATER

Brad Zachman

The system-wide water production comparison was updated through Nov. 6. System demand is at a seasonal low and normal for this time of year.



The Avon Drinking Water Facility (ADWF) and the Berry Creek Wellhouse are offline for planned maintenance and capital improvement projects. Both facilities will be operational prior to the Thanksgiving holiday. The work at ADWF includes installation of piping infrastructure that will allow water to be downloaded from the Avon high pressure zone to the Avon low pressure zone. The work at Berry Creek Wellhouse includes replacement of a leaking sodium hypochlorite bulk storage tank.



*Pipe Fitting Work at the Avon Drinking Water Facility*



*Sodium Hypochlorite Storage Tank Replacement at the Berry Creek Wellhouse*



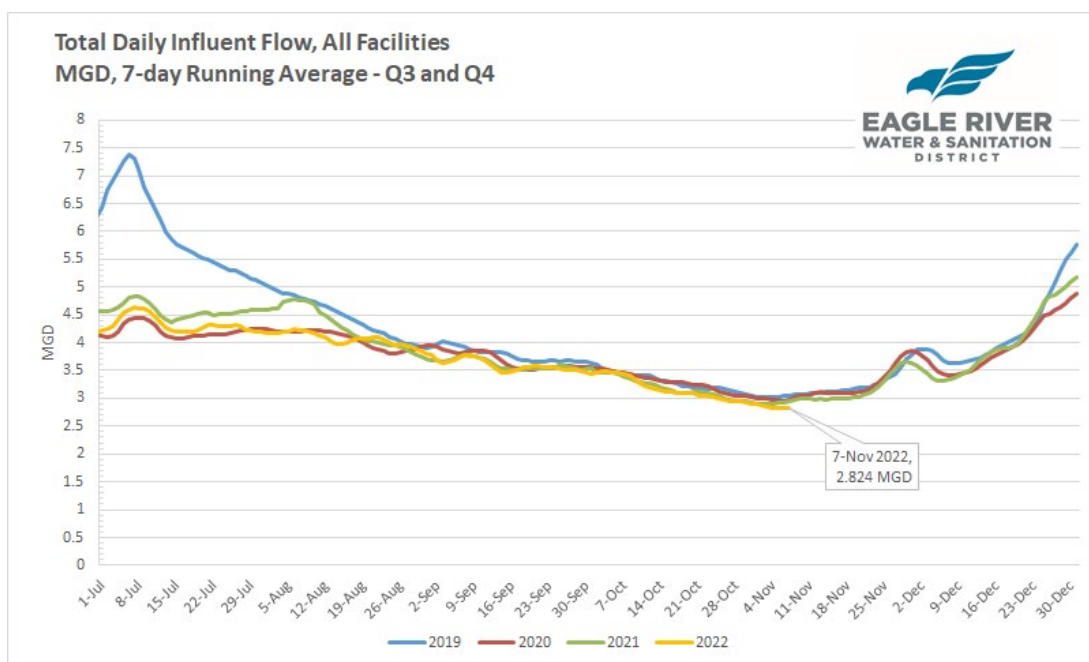
## LABORATORY &amp; WATER QUALITY

No update.

## WASTEWATER

Rob Ringle

Influent wastewater flow and loading reached annual lows in the first week of November. Influent loading data has already indicated signs of an early increase. The trend is likely to further accelerate following the scheduled opening day for ski operations at Vail on Nov. 11. Staff are managing the treatment processes at all three facilities in anticipation of a strong and early start to the ski season as facilitated by relatively favorable early season mountain conditions.



Wastewater staff made progress on several significant projects during the past couple months of stable loading. Avon WW staff have continued to have success in optimizing operation of the newly constructed aeration basin #2 process train while also preparing for commissioning the final remaining process systems presently being constructed with the Nutrient Upgrade Project. Staff are preparing to transfer secondary treatment operations over to the new aeration basin #1 train while simultaneously dewatering the aeration basin #2 train for final work in that area. The full treatment process capacity is scheduled to be available for service by mid-December. New limits for total phosphorus and total inorganic nitrogen (TIN) will go into effect for the Avon facility on Jan. 1, 2024.

The WW department is preparing for the upcoming Compliance Evaluation Inspection (CEI), as conducted by CDPHE. While inspection notices have not yet been received, the inspections are



anticipated to occur in early 2023 based on the normal inspection frequency for the District wastewater facilities. Internal audits are being performed in November as one step in preparation.

#### FIELD OPERATIONS

Niko Nemcanin

FO team is busy supporting contractors and customers with end of season tasks including construction inspections, water service taps and construction design investigations and field work.

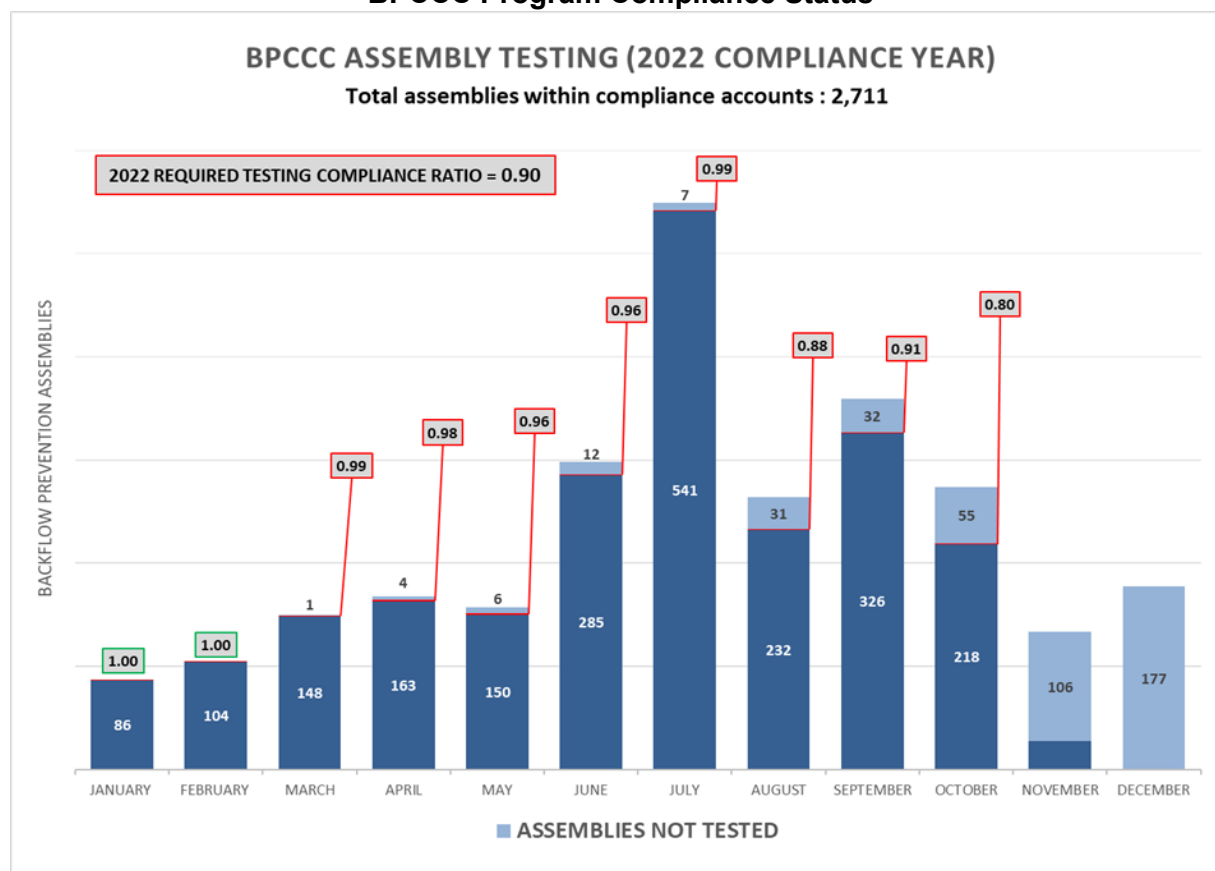
Staff continues to flush fire hydrants and maintain valves, but in general, the team is wrapping up summer maintenance projects and operations.

#### UTILITY SERVICES

Shane Swartwout

The BPCCC team is working hard to reach the required testing compliance ratio of 0.90 by the end of the calendar year. There are currently 168 compliance assemblies that need to be tested to reach compliance for 2022. This same time last year there were over 500 assemblies that need to be tested. Staff is currently scheduling in-house testing of the remaining assemblies and the team is confident that compliance will be achieved in the upcoming weeks.

#### BPCCC Program Compliance Status



### Meter Services – Advanced Metering Infrastructure Status (Updated 11-8-2022)

Report Date:	11-8-2022
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AMI SYSTEM STATUS	ERWSD	UERWA	TOTAL
(1) Total No. of Meters	3192	6829	10021
(2) No. of AMI Meters	3096	5734	8830
(3) System Percentage of AMI Meters	97%	84%	88%
Meters Remaining to Reach 100% AMI	96	1095	1191

The meter services team has started a comprehensive audit of accounts with meters 1.5" and larger. The audit includes verifying CIS (customer information system) meter configurations and field inspection of each meter. This effort will ensure customer meters are working properly and consumption is being registered and billed accurately.

#### 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: Commissioning of all RTU sites have been completed. Currently the team is working on punch list items and closeout documents, including a deductive Change Order for \$212,000 that we were able to save throughout the final phase. The RTU project is tracking for a December, 2022 final completion. The project team will present to the board at the Nov. 17 meeting.

## **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: To align with operational conditions, District staff decided to fill the tank on Nov. 28, after the completion of the construction project at Avon Drinking Water Facility. The project is substantially complete. ERWSD staff completed a punchlist walk and identified minor items for correction. DN Tanks and their subcontractors are currently working to correct minor punchlist items before final completion is issued.

## **Fenno Wellhouse and Raw Water Conveyance**

Jeffrey Schneider/Carter Keller

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:

We continue to work with homeowners, a local HOA, and golf course staff on acquisition of additional easements at wells F5 and F7. After easements are obtained the wells will be pulled and inspected in a similar fashion. We anticipate pulling and assessing well F6 the week of Nov. 14 and pursuing some tree removals this fall to prepare for well access in the spring. Following the well assessment and repair work, permanent improvements to the raw water conveyance consisting of piping, controls, and electrical will be designed based on the findings of the current effort.

## **Water Production and Treatment Masterplan**

Jenna Beirsto

General Project Scope: 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: Carollo is working on revisions to Chapter 1 and drafting of Chapters 2 and 3 of the masterplan report. The master planning team has begun building a specialty model (Blue Plan It) to better analyze the entire water system between the District and Authority. A meeting is scheduled for Nov. 15 to review the progress of the model construction. The district is working on collecting additional water quality data on some of the wells in the system, with a sampling day scheduled for Nov. 14. Workshop 4 is scheduled for Nov. 29 to discuss alternative water sources.

Contracting for the next phase of work is expected to begin late in 2022, with an anticipated change order to the engineer to continue work early in 2023.

## **Avon Wastewater Treatment Facility (WWTF) Fire Flow Improvements** Woodson Spring

General Project Scope: The Avon WWTF Fire Flow Improvements consist of two major components. The first is installation of 1,100 linear feet of 12" water main down Millie's Lane and into the Avon WWTF site. The second is modifications within the Avon Drinking Water Facility (DWF) to transfer water from the high zone to the low zone. The project will bring the Avon WWTF into compliance with fire flow requirements and address a long-standing deficiency.

Project Update: Pipeline work has been completed with the installation of a new fire hydrant in front of the Avon admin building entrance. The existing fire hydrant will be removed the week of Nov. 14. Asphalt millings are being placed for the winter season as a temporary surface with final paving planned for spring. All pressure reducing and surge anticipator valves have been installed inside the ADWF. Planning for disinfection, testing and startup is underway and scheduled for the week of Nov. 14.

### **WASTEWATER PROJECTS**

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## **Avon Wastewater Treatment Facility (AWWTF) Nutrient Upgrades** Jeff Schneider

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: Crews are working on startup of multiple systems in preparation for the upcoming ski season's increase in flows. New aeration diffusers are installed and tested, as well as mixer devices. WWTF staff plans on switching to the northern Aeration Basin train for secondary treatment on or around Nov. 15. In addition, equalization basin mixing including the pumping, piping, and valves are nearly complete and ready for testing prior to the holiday. Site preparation for paving was underway but the October snowstorm made the subgrade unsuitable for final paving. As a result, and in collaboration with our operations teams, we will utilize reclaimed asphalt millings as a temporary surface to ensure a successful final product in spring of 2023.

Pricing has been accepted for installation of new fencing around the entire facility and the design of a new retaining wall along the Eagle Valley Trail on the south property line is underway. Geotechnical exploration for wall design was completed in October. Both fencing and walls are in the Town of Avon design review process for approval. The extensive additional work such as walls/fencing resulted in an additional 120 days being added to the project schedule (original

substantial completion was Dec. 9, 2022), and we are currently negotiating the reduced monthly general conditions costs due to a reduced site presence and overhead. The project continues to track well below budget.

### **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.

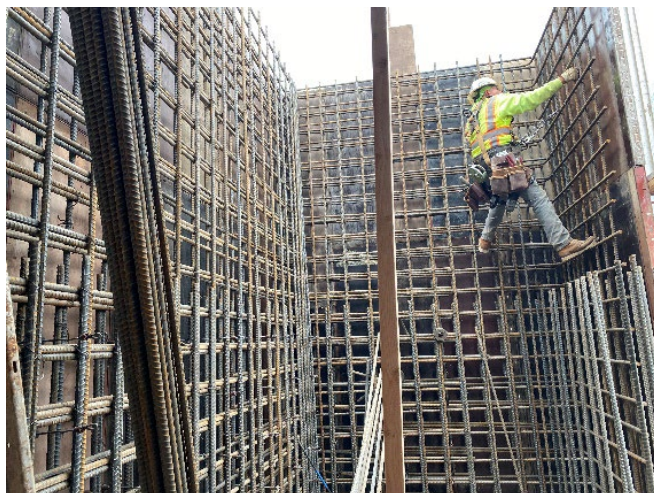
#### Project Update:

*West Vail Interceptor Aerial Crossing:* The Contractor completed all work including all of the punch list items. The trail has been closed down for the season and the project is in final closeout.

*Lift Station 4 and Force Main Replacement:* This project combines three packages of work into one large project. Package A includes the lift station 4 replacement, package B is replacement of the existing force main with two 8" HDPE force mains, and package C in partnership with Eco Trails (Eagle County) to connect the bike trails from the lift station to the West Vail Interceptor crossing. The Contractor's pipe crew demobilized from the site. Gould and their concrete subcontractor, Rodco, placed the walls for the wet well on Oct. 31 and Nov. 8. The contractor will begin installation of the gravity sewer and bypass sewer line once forms are removed from the wet well walls. Shoring and rebar, forms, and concrete for the lid are anticipated before Thanksgiving to allow for water testing of the wet well in early to mid-December.



*Placing concrete for the wet well wall*



*Rodco tying rebar for the second half of the wet well walls*

### **Avon Lab Improvements**

Carter Keller

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: A design review application for a minor exterior modification to the Admin building has been submitted to the Town of Avon for staff approval. Work is anticipated to begin after the new year, with HVAC equipment delivery scheduled for April.

### **Vail Wastewater Treatment Facility (VWWTF) Master Plan Improvements**

Mark Mantua

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. Black and Veatch was selected and the design consultant and PCL Construction was selected as the contractor to complete this project.

Project Update: PCL is preparing to form and pour the new generator pad. Excavation and subgrade placement at the generator pad is complete. PCL and their subcontractors installed and backfilled 150 linear feet of electrical duct bank. Remaining work in Phase I includes pouring the new generator pad, electrical tie-ins to existing transformers, 50 linear feet of ductbank and site restoration. The 90% design submittal for phase II was reviewed by the District and PCL. The design engineer is working to issue 100% plans for Phase II of the project. PCL will develop the

phase II cost proposal to be submitted to the District and is expected to submit the week of Nov. 14.

## GENERAL CAPITAL

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### Fleet Maintenance Facility

Mark Mantua


General Project Scope: The 2020 Overall Facilities Master Plan indicated an opportunity to relocate the fleet maintenance facility, along with large vehicle and equipment storage and water meter testing and storage, to the property known as “Hillcrest” at the corner of Hillcrest Drive and U.S. Highway 6. We are moving forward with that concept but located on a parcel of land immediately east of the Edwards Wastewater Treatment Facility on Lake Creek Village Drive.

Project Update: The project architectural consultant, D2C, has begun the data collection phase of the project. D2C is currently reviewing existing survey and engineering reports conducted on the existing property. To better understand the District's needs at the new facility, D2C facilitated site visits, interviews and questionnaires. D2C has begun developing preliminary site concepts. Preliminary site concepts are expected from D2C in early December.





## MEMORANDUM

**TO:** District and Authority Boards of Directors  
**FROM:** Jason Cowles, P.E.   
**DATE:** November 9, 2022  
**RE:** Engineering & Water Resources Report

### Authority Unallocated Water Update

The Authority's unallocated water projection remains at 227.31 acre feet. This includes 51.19 acre feet of unrestricted Eagle Park Reservoir water, which includes the 25 acre feet pledged to the Authority by the District. It also includes 78.13 acre feet of Eagle Park Reservoir water committed to workforce housing, and 97.98 historic irrigation season consumptive use credits.

It should be noted that the Authority has very few Brett Ditch HCU credits available in August and September and must use in-basin storage releases to augment depletions for cash in lieu of water rights customers in August in September per the Authority's decreed global augmentation plan. Thus, the limiting factor for the Authority's ability to serve new developments will be the 51.19 acre feet of remaining unrestricted Eagle Park Reservoir water. These projections will be updated next month when we discuss the results of our recent model runs.

### Bolts Lake

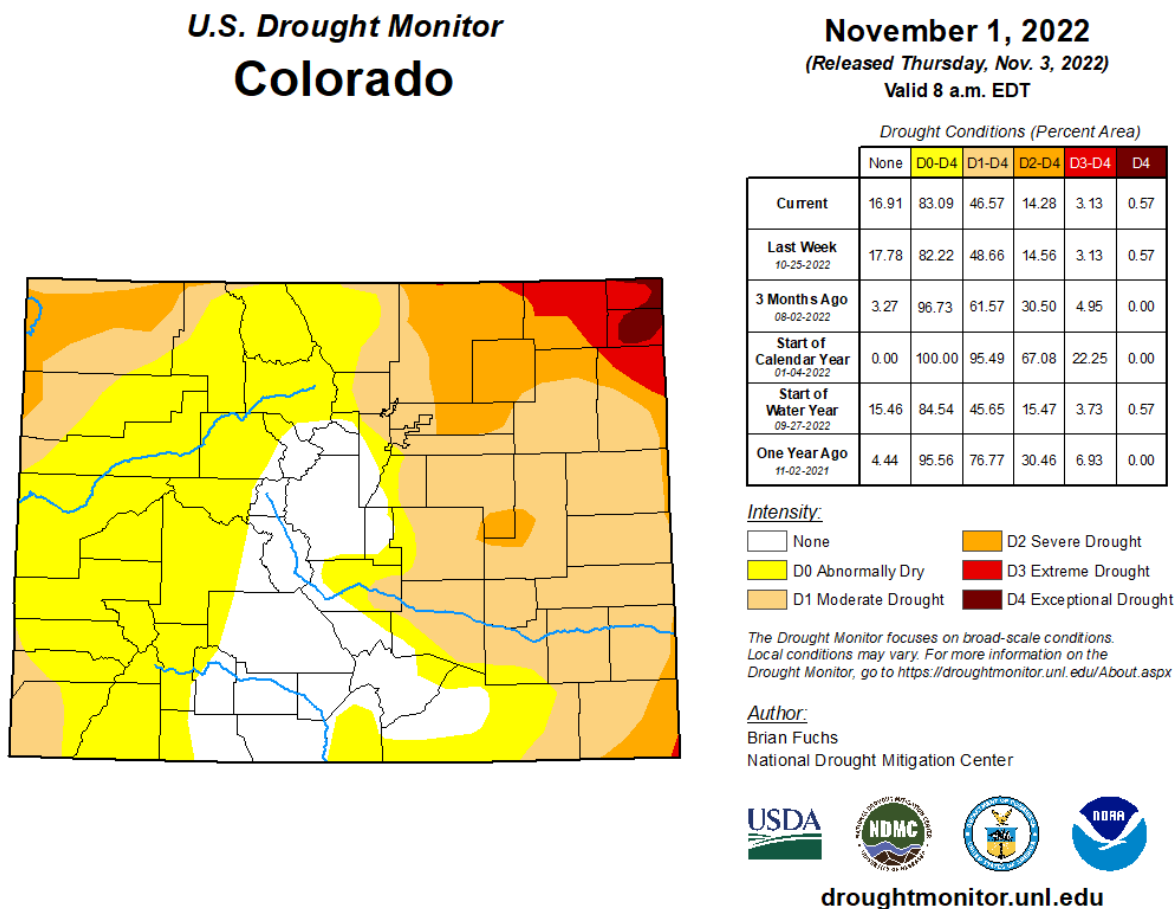
Field investigations for the preliminary design of Bolts Lake reservoir wrapped up last week. Geotechnical borings were hampered by weather and challenging, deep drilling conditions at several of the planned boring sites including collapse of one of the boreholes, substantial boulders, and the loss of one drill head. Despite the challenges, five of six planned boreholes were completed. Shannon and Wilson made the decision to forego the sixth borehole due to budget constraints, weather, and the challenging drilling conditions encountered at the other sites. Data collected from this effort will inform the design of the main dam and saddle dam structures and will add to our understanding of groundwater conditions at the site.



## Water Resources Update

The latest U.S. Drought Monitor map for Colorado is shown below in Figure 1. Drought conditions have slightly improved across the state, but are largely unchanged in Eagle County with a majority of the County remaining in the abnormally dry category

Figure 1: US Drought Monitor, Colorado November 3, 2022 (National Drought Mitigation Center).



On October 20, the NOAA Climate Prediction Center issued its 2022-23 U.S. Winter Outlook. The winter outlook for temperature indicates a likelihood that above normal to equal chances of below-, near-, and above-normal temperatures will occur in our region (Figure 2). This is largely attributable to the La Niña weather pattern that continues to persist in the Pacific Ocean. The winter outlook for precipitation indicates equal chances of below-, near-, or above-average seasonal precipitation for the northern and central Colorado Rockies (Figure 3). The winter outlook for drought predicts widespread drought conditions to continue or worsen throughout much of the West, the Great Basin, and the central to southern Great Plains (Figure 4).

Figure 2: Winter 2022-23 US Temperature Outlook (NOAA Climate Prediction Center).

## Winter 2022-23: U.S. Temperature Outlook

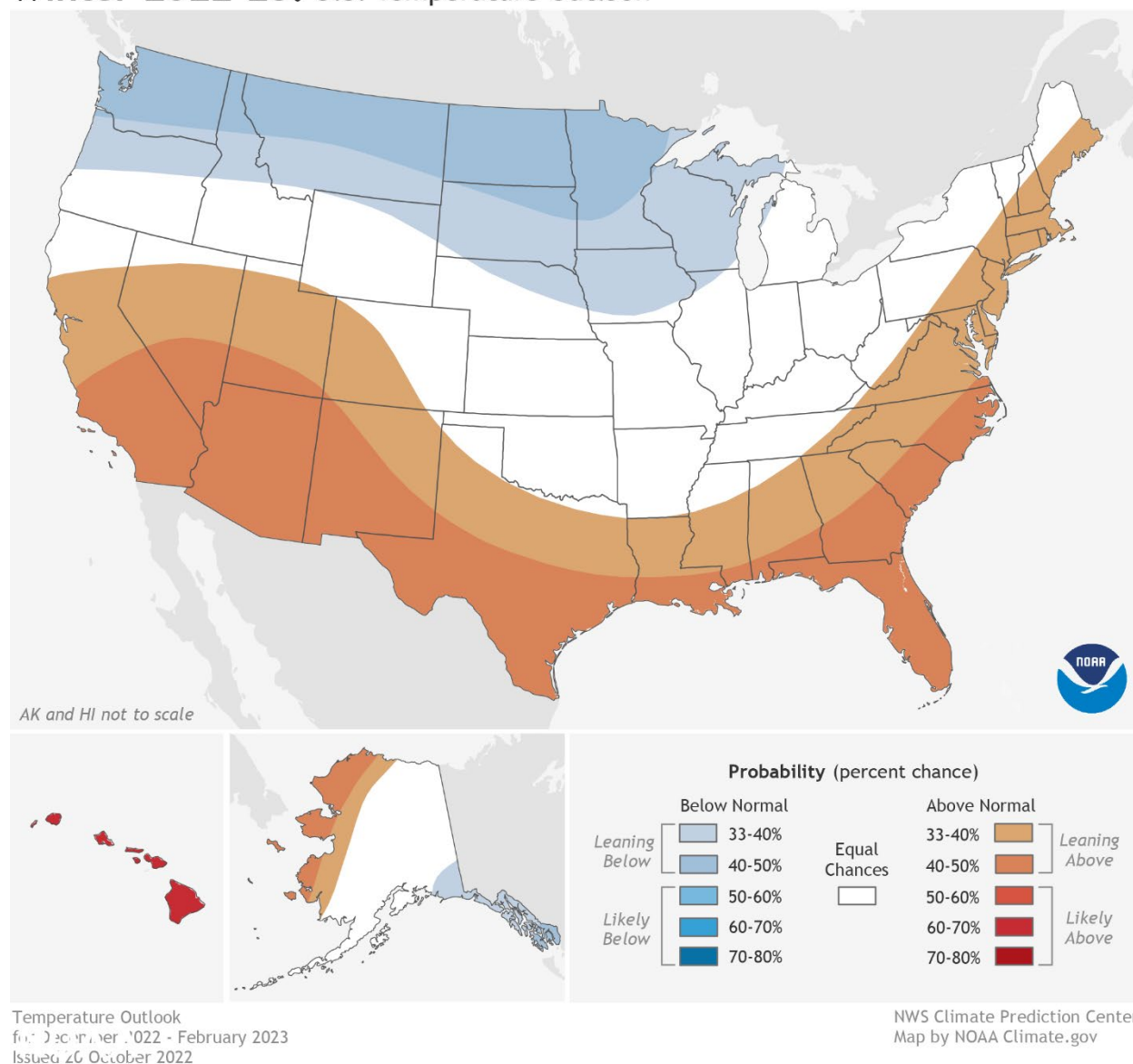


Figure 3: Winter 2022-23 US Precipitation Outlook (NOAA Climate Prediction Center).

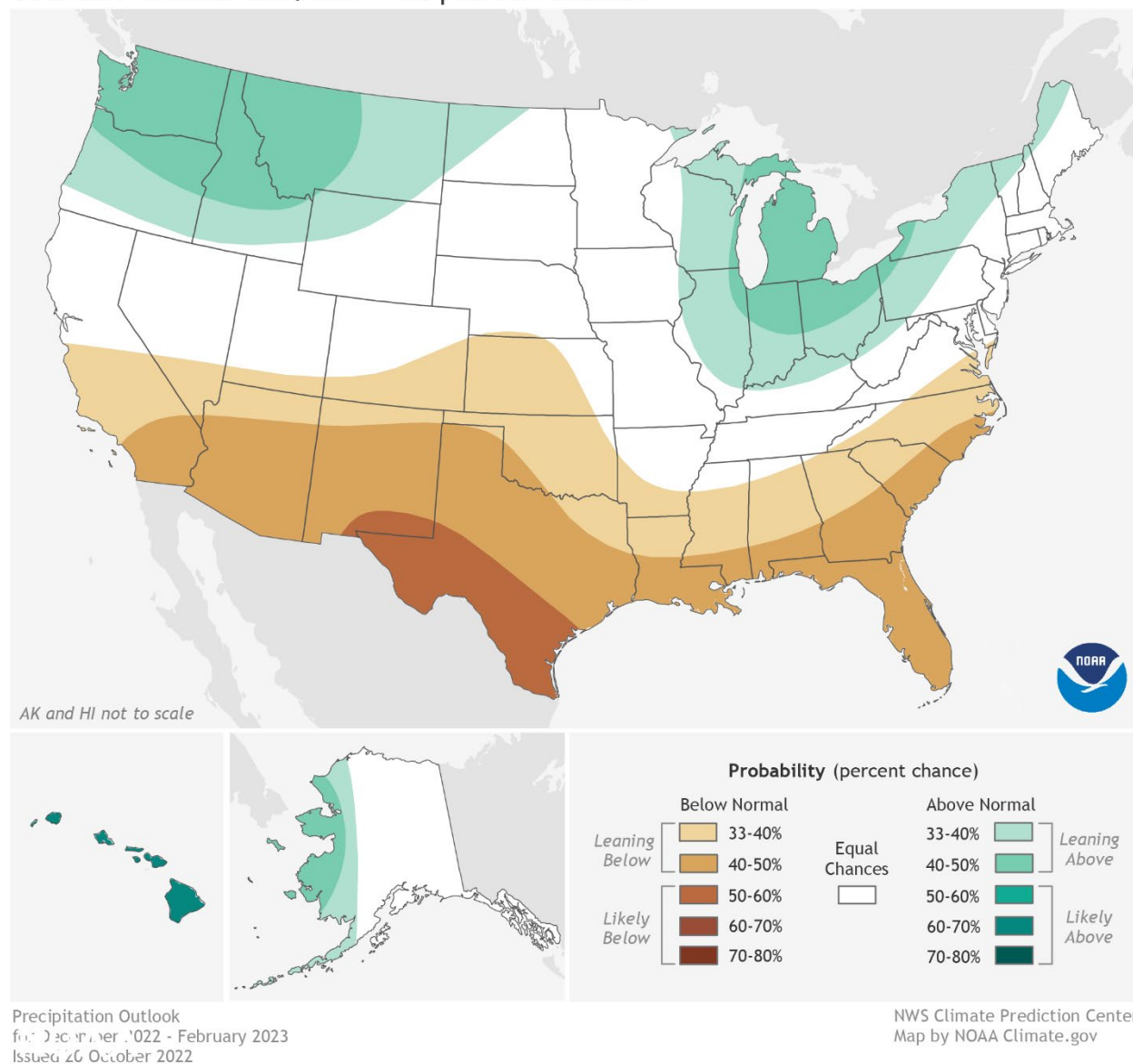
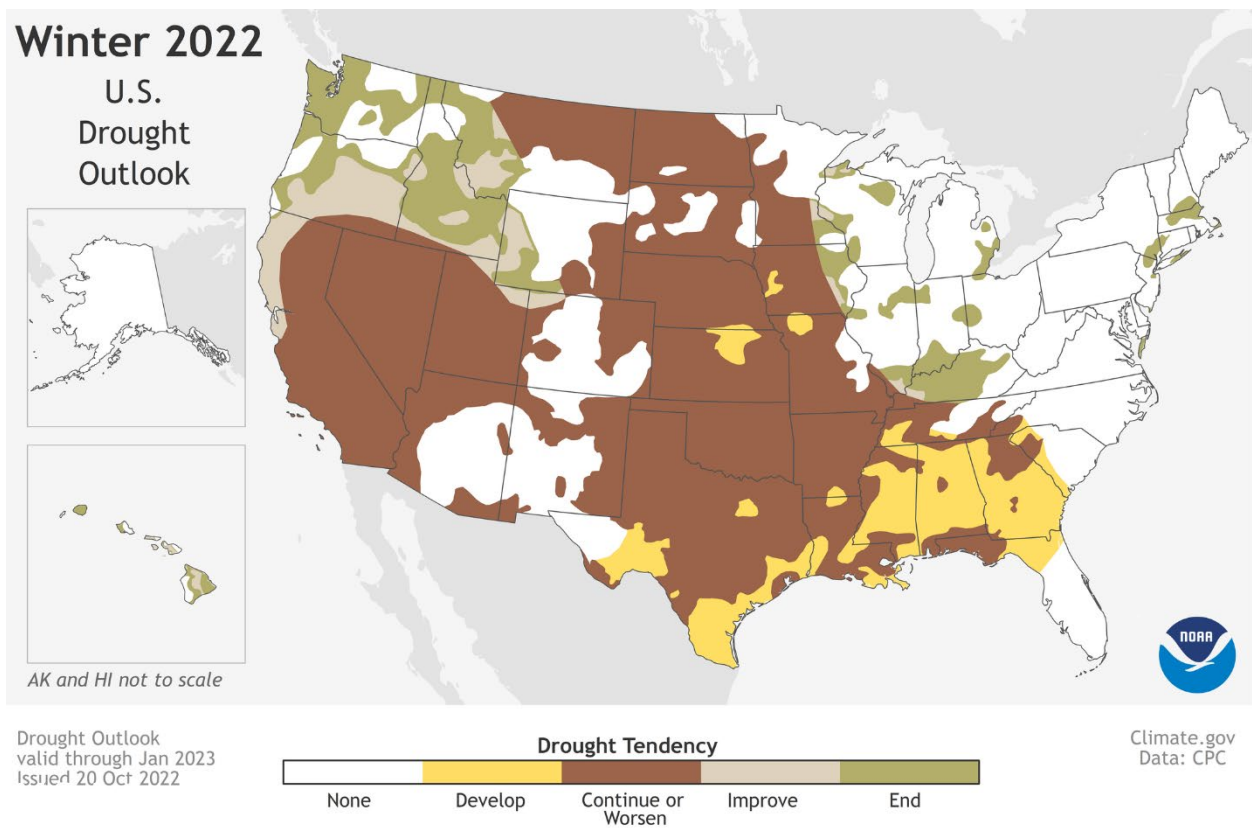
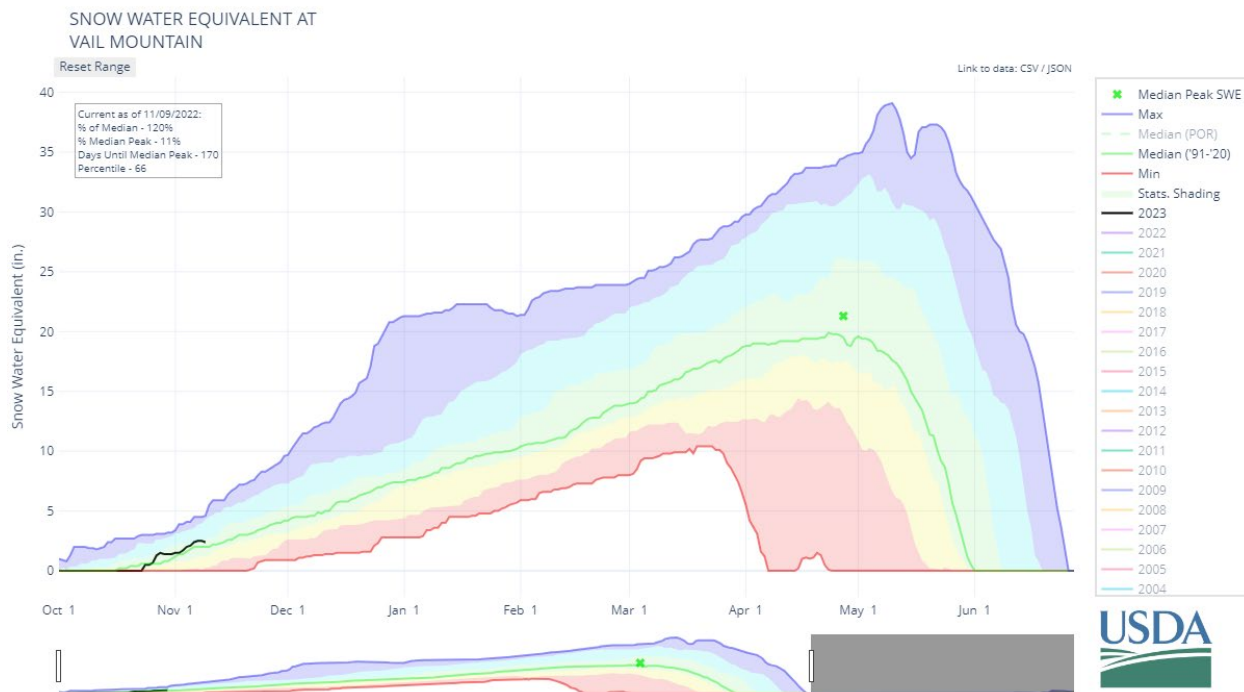
**Winter 2022-23: U.S. Precipitation Outlook**

Figure 4: Winter 2022-23 US Drought Outlook (NOAA Climate Prediction Center).



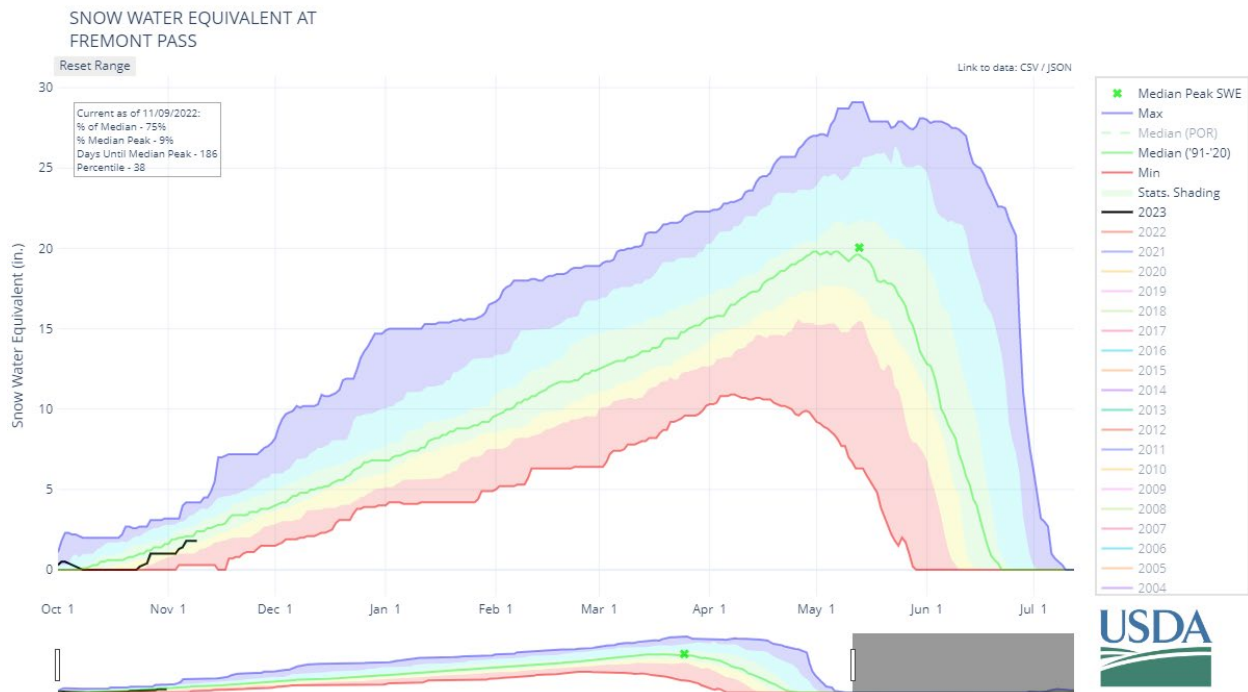
Snow water equivalent (SWE) measured at the Vail Mountain Snotel site (Figure 5) is trending slightly above normal at 2.4 inches or 120% of the 30-year median.

Figure 5: Snow Water Equivalent, Vail Mountain SNOTEL, November 9, 2022 (USDA).



SWE measured at the Freemont Pass Snotel site near Eagle Park Reservoir (Figure 6) is trending slightly below normal at 1.8 inches or 75% of the 30-year median.

Figure 6: Snow Water Equivalent, Fremont Pass SNOTEL, November 9, 2022 (USDA).





# Authority Surplus Augmentation Supply

Updated: 3/16/2022 by JEC

	HCU, 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		
<b>Modeled Augmentation Surplus<sup>1</sup></b>	105.70	87.40	127.30		320.40
<b>Projects with Ability to Serve Letters</b>					
Club Residences at CVC	0.04		1.04	0.03	1.08
<b>Current Augmentation Surplus<sup>2</sup></b>	<b>105.66</b>	<b>87.40</b>	<b>126.26</b>		<b>319.32</b>
<b>Augmentation Projections for Projects in Land Use Entitlement Process</b>					
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	0.45		3.16	0.09	3.61
Warner Building Dormitories	0.02		0.02	0.01	0.04
Riverwalk PUD Guide Amendment	0.07		1.67	0.05	1.74
Brown PUD	0.35		3.12	0.09	3.47
<b>Total Pending Augmentation</b>	<b>7.68</b>	<b>9.27</b>	<b>75.06</b>	<b>2.52</b>	<b>92.01</b>
<b>Projected Augmentation Surplus</b>	<b>97.98</b>	<b>78.13</b>	<b>51.19</b>		<b>227.31</b>

## 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:** November 17, 2022

**RE:** Communications and Public Affairs Report

### Colorado River System

The U.S. Department of the Interior issued a news release on Oct. 28 that states the Bureau of Reclamation "is initiating an expedited, supplemental process to revise the current interim operating guidelines for the operation of Glen Canyon and Hoover Dams in 2023 and 2024." Further, "Reclamation will publish a Notice of Intent (NOI) to prepare a Supplemental Environmental Impact Statement (SEIS), which will include proposed alternatives to revise the December 2007 Record of Decision associated with the Colorado River Interim Guidelines."

Given the crisis in the Colorado River system, the DOI action is seeking to modify operations for 2023 and 2024 rather than having to operate per the [2007 Interim Guidelines](#) (which run through 2025 and will set operations for 2026). Separately, there is already a process to develop post-2026 operations and the DOI press release reinforces this with, "The NOI announced today to address immediate challenges does not interfere with Reclamation's separate process for determining post-2026 Colorado River Operations."

In addition to the DOI news release, two media reports are attached that address DOI's action. Two related media stories are also attached concerning the focus on evaporative loss in the lower Colorado River system and the naming of former U.S. Reclamation Commissioner Brenda Burman as the Central Arizona Project's next general manager.

### Colorado Green Business Network certification

The Colorado Department of Public Health and Environment announced that the district is one of 42 Colorado companies to have earned a spot as certified members of the newly-formed [Colorado Green Business Network](#) (which is the new branded version of CDPHE's Environmental Leadership program, a statewide recognition program with over 23 years of tradition to its name). The state [news release](#) recognized the district as one of six that have made commitments to renewable energy through solar energy production, wind power renewable energy certificates, and energy offsets. Three employees attended the state's recognition event on behalf of the district.

### Attachments:

1. Oct. 26 KUNC: Lower Colorado River reservoir evaporation the focus of new analysis
2. Oct. 28 U.S. Department of the Interior: Interior Department Initiates Significant Action to Protect Colorado River System
3. Oct. 28 LA Times: Feds announce new push to shore up shrinking Colorado River
4. Oct. 28 KUNC: Feds want the ability to cut back on Colorado River reservoir releases over the next two years
5. Nov. 3 Central Arizona Project: Central Arizona Water Conservation District names Brenda Burman as Central Arizona Project's next general manager
6. Nov. 3 VOX: The ugly story of how corporate America convinced us to spend so much on water



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## Western Water Coverage

Throughout the history of the American West, water issues have shown their ability to both unite and divide communities. As an imbalance between water supplies and demands grows in the region, KUNC is committed to covering the stories that emerge.

# Lower Colorado River reservoir evaporation the focus of new analysis

KUNC | By [Luke Runyon](#)

Published October 26, 2022 at 5:46 PM MDT



*Luke Runyon / KUNC*

Lake Mead's bathtub ring rises above the water in Feb. 2018.

A Nevada water agency has taken the first concrete step toward accounting for evaporation and other losses in the Colorado River's Lower Basin. The new analysis attempts to pinpoint exactly how much water is lost, and who should cut back to bring the system closer to a balance between supply and demand.

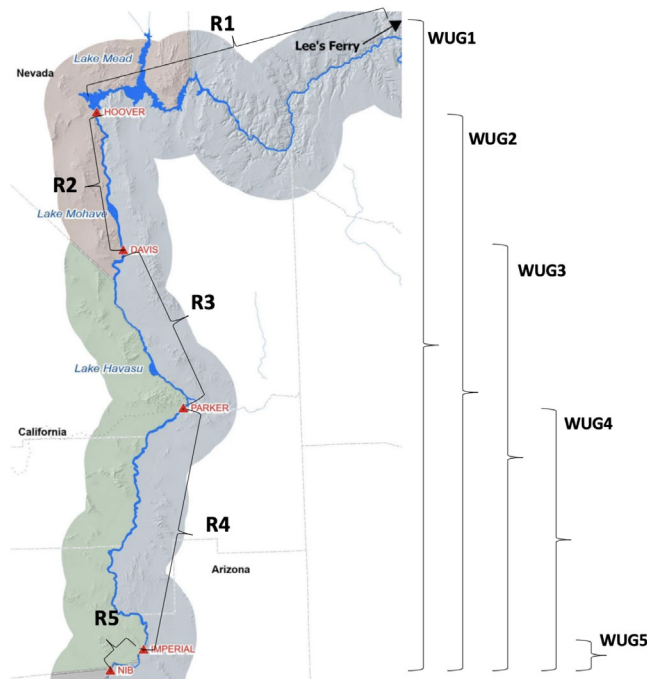
An analysis compiled by the Southern Nevada Water Authority estimates the total amount of water lost in the river's lower reaches. If implemented in its current form, the proposal would translate to significant cutbacks for users in Nevada, Arizona and California.



The agency's staff presented the analysis to representatives from the seven U.S. states that rely on the beleaguered Colorado River for drinking and irrigation water supply. Federal officials were also present at the Manhattan Beach, California meeting held in the third week of October.

Farmers and cities in the river's Lower Basin states of California, Arizona, and Nevada have never had to fully account for the amount of water lost to evaporation, or to leaky infrastructure, also called transit losses.

About 1.5 million acre-feet of water is lost to evaporation and other losses each year, according to the Southern Nevada Water Authority analysis. That's more water than the state of Utah uses from the river annually. One acre-foot is the volume of water needed to fill an acre of land to a height of one foot, or approximately 325,000 gallons.



*Southern Nevada Water Authority /*

The Southern Nevada Water Authority analysis divides the Lower Colorado River into five reaches in order to calculate potential evaporative and transit losses for users.

“This is work we had started internally a little while ago to get our heads around, what is the exposure to our community? And how do we make sure we have an adequate water supply?” said Colby

Pellegrino, the Southern Nevada Water Authority's deputy general manager.

The analysis examines where water loss occurs downstream of Lee's Ferry in northern Arizona to the northern boundary of the U.S.-Mexico border. Both the U.S. and Mexico rely on the river. The analysis divides the river into five reaches, and includes the large reservoirs in the Lower Basin -- Lake Mead, Lake Mohave and Lake Havasu.

The analysis then calculates which states and which users within each state could be cut back to account for the overall basin-wide loss. Users upstream, like the Southern Nevada Water Authority, carry a lesser burden than those downstream, as users upstream are not reliant on downstream infrastructure and reservoirs to deliver their water supplies. Those users further downstream on the river, like California's Imperial Irrigation District, would face the highest volume of potential cutbacks, factoring in their placement on the river and their volume of overall use, according to this analysis.

There is no set standard to account for these losses, Pellegrino said, and this initial analysis is meant to get the conversation started as a potential model for how to divvy up the cuts among users.

"We can't even build consensus unless we get a straw man out there and start talking about what the different elements of such a calculation might be," Pellegrino said.

**SUMMARY OF ASSESSMENTS BY STATE / MX**

State	afy
AZ	419,381
CA	773,008
NV	17,570
MX	333,040
<b>TOTAL</b>	<b>1,543,000</b>

**SUMMARY OF WATER USER ASSESSMENTS**

Reach	State	Major Water Users	afy
1	NV	LVVWD/SNWA - SNWP	15,514
3	AZ	Central Arizona Water Conservation District	190,474
3	CA	The Metropolitan Water District of Southern California	110,464
4	AZ	AZ Colorado River Indian Reservation	45,378
4	AZ	Wellton-Mohawk I.D.D.	51,654
4	CA	Coachella Valley Water District	70,074
4	CA	Imperial Irrigation District	509,508
4	CA	Palo Verde Irrigation District	71,335
5	AZ	Yuma County Water Users' Association	57,056
5	AZ	Yuma Mesa I.D.D.	34,342
5	MX	Mexico	333,040
<b>Subtotal</b>			<b>1,488,839</b>
Reach	State	Remaining Water Users	afy
All	AZ	Other Users in AZ	40,478
All	CA	Other Users in CA	11,627
All	NV	Other Users in NV	2,056
<b>Subtotal</b>			<b>54,161</b>
<b>TOTAL</b>			<b>1,543,000</b>

<sup>1</sup> Major users considered to have losses greater than 10,000 afy

*Southern Nevada Water Authority /*

The Southern Nevada Water Authority's analysis puts total Lower Basin evaporation and transit loss at 1.5 million acre-feet of water annually, and then divides up that loss among users based on their total use and placement on the river.

Using the Southern Nevada Water Authority's methods, the river's big users could be staring down significant cuts to their supplies to account for evaporative and transit loss. To achieve the total savings of 1.5 million acre-feet per year, the analysis assigns cutbacks of 509,508 acre-feet on the Imperial Irrigation District, 190,474 acre-feet on the Central Arizona Project system, and 110,464 acre-feet to the Metropolitan Water District of Southern California, with the rest being contributed by dozens of other smaller users.

Mexico, which is able to store some of its river water in American reservoirs because of binational agreements, is by treaty not required to share in transit losses. But if the country were to share in additional reductions related to evaporation and transit loss, the country's total could be 333,040 acre-feet per year when considering its total uses and its placement as the river's final user, according to the analysis.

Accounting for evaporation has become a rallying cry from users in the river's Upper Basin states of Colorado, Wyoming, Utah and New Mexico and a tension point in ongoing negotiations. Those states already use a system to track losses and are charged for them in their

basin-wide accounting. Upper Basin water managers say the current system is unfair.

“This is something the federal government must do right now,” said Andy Mueller, director of the Colorado River District, a water agency on Colorado’s western slope, at a September public event. “They have the right to do it under the [Colorado River] Compact. They have the right to do it lawfully. They just don’t want to do it because it hurts and it’s maybe going to bring in litigation.”

Federal officials have identified the issue as a short-term priority. At a September gathering of water managers in Santa Fe, Interior Secretary Deb Haaland [told attendees](#) it was time for a “candid conversation” about evaporation and transit loss.

In June, Bureau of Reclamation commissioner Camille Calimlim Touton told members of a Senate committee that the river system required an additional two to four million acre-foot reduction in use in order to stabilize its largest reservoirs. Accounting for evaporation could be one step toward achieving that overall reduction, water experts have said.

*This story is part of ongoing coverage of the Colorado River, produced by KUNC and supported by the Walton Family Foundation.*

## Tags

[Environment](#)[Colorado River](#)[Topic: Western Water Coverage](#)[Colorado River Basin](#)[Water](#)[Water Supply](#)[Lake Mead](#)

## Luke Runyon

As KUNC’s managing editor and reporter covering the Colorado River Basin, I dig into stories that show how water issues can both unite and divide communities throughout the Western U.S. I edit and produce feature stories for KUNC and a network of public media stations in Colorado, Utah, Wyoming, New Mexico, Arizona, California and Nevada.



## Press Releases

Share

# Interior Department Initiates Significant Action to Protect Colorado River System

Proposal to revise operating guidelines one of several decisive steps underway to protect the System

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10/28/2022

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Date: Friday, October 28, 2022

Contact: [Interior\\_Press@ios.doi.gov](mailto:Interior_Press@ios.doi.gov)

**WASHINGTON** — As collaborative work continues across the Colorado River Basin to address the ongoing drought crisis, the Department of the Interior today announced expedited steps to prepare new measures that, based on current and projected hydrologic conditions, are needed to improve and protect the long-term sustainability of the Colorado River System. To address the serious operational realities facing the System, the Bureau of Reclamation is initiating an expedited, supplemental process to revise the current interim operating guidelines for the operation of Glen Canyon and Hoover Dams in 2023 and 2024 in order to provide additional alternatives and measures needed to address the likelihood of continued low-runoff conditions across the Basin.

“The Interior Department continues to pursue a collaborative and consensus-based approach to addressing the drought crisis afflicting the West. At the same time, we are committed to taking prompt and decisive action necessary to protect the Colorado River System and all those who depend on it,” said **Secretary Deb Haaland**. “Revising the current interim operating guidelines for Glen Canyon and Hoover Dams represents one of many critical Departmental efforts underway to better protect the System in light of rapidly changing conditions in the Basin.”

Reclamation will publish a [Notice of Intent \(NOI\)](#) to prepare a Supplemental Environmental Impact Statement (SEIS), which will include proposed alternatives to revise the [December 2007 Record of Decision](#) associated with the Colorado River Interim Guidelines. The 2007 Interim Guidelines provide operating criteria for Lake Powell and Lake Mead, including provisions designed to provide a greater degree of certainty to water users about timing and volumes of potential water delivery reductions for the Lower Basin States, and additional operating flexibility to conserve and store water in the system.

The NOI outlines that, in order to ensure that Glen Canyon Dam continues to operate under its intended design, Reclamation may need to modify current operations and reduce Glen Canyon Dam downstream releases, thereby impacting downstream riparian areas and reservoir elevations at Lake Mead. Additionally, in order to



protect Hoover Dam operations, system integrity, and public health and safety, Reclamation may need to also modify current operations and reduce Hoover Dam downstream releases.

"We are taking immediate steps now to revise the operating guidelines to protect the Colorado River System and stabilize rapidly declining reservoir storage elevations," said **Reclamation Commissioner Camille Calimlim Touton**. "Today's action brings new ideas and necessary measures to the table as we consider alternatives to revise operations to better protect Colorado River System in the near term while we also continue to develop long-term, sustainable plans that reflect the climate-driven realities facing the Colorado River Basin."

As described in the NOI, this SEIS will analyze alternatives including:

- **Framework Agreement Alternative:** This alternative would be developed as an additional consensus-based set of actions that would build on the existing framework for Colorado River Operations. This alternative would build on commitments and obligations developed by the Basin States, Tribes and non-governmental organizations as part of the 2019 Colorado River Drought Contingency Plan (DCP) Authorization Act.
- **Reservoir Operations Modification Alternative:** This alternative would be developed by Reclamation as a set of actions and measures adopted pursuant to Secretarial authority under applicable federal law. This alternative would also consider how the Secretary's authority could complement a consensus-based alternative that may not sufficiently mitigate current and projected risks to the Colorado River System reservoirs.
- **No Action:** The No Action Alternative will describe the continued implementation of existing agreements that control operations of Glen Canyon and Hoover Dams. These include the 2007 Interim Guidelines and agreements adopted pursuant to the 2019 DCP. Intensive ongoing efforts to achieve water conservation actions in the Basin are underway through a number of programs, including the recent Inflation Reduction Act. Implementation and effectiveness of these efforts will inform the assessment of existing operations and agreements.

The action announced today builds on steps announced in August 2022 as part of Reclamation's release of the [Colorado River Basin August 2022 24-Month Study](#), as well as additional actions announced in September 2022 to [reduce water consumption](#) across the Basin in light of critically low water supplies and dire hydrological projections.

The Department also recently announced new [drought mitigation funding](#) opportunities to provide reliable, sustainable and equitable water and power supplies across the Basin. A newly created Lower Colorado River Basin System Conservation and Efficiency Program, funded with an initial allocation through the Inflation Reduction Act, will help increase water conservation, improve water efficiency, and prevent the System's reservoirs from falling to critically low elevations that would threaten water deliveries and power production. The Inflation Reduction Act includes \$4 billion in funding specifically for water management and conservation efforts in the Colorado River Basin and other areas experiencing similar levels of drought.

The NOI announced today to address immediate challenges does not interfere with Reclamation's separate process for determining post-2026 Colorado River Operations.

Members of the public interested in providing input on the SEIS can do so through December 20, 2022, per instructions in the *Federal Register* that will be published in the coming days.

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CLIMATE & ENVIRONMENT

# New push to shore up shrinking Colorado River could reduce water flow to California





Water flows down the Colorado River at the Glen Canyon Dam near Page, Ariz. White surfaces along the banks of the river and lake show previous water levels in the second-largest reservoir in the U.S. (Luis Sinco / Los Angeles Times)

BY IAN JAMES | STAFF WRITER

OCT. 28, 2022 12:52 PM PT



With the nation's two largest reservoirs [continuing to decline](#), federal officials announced plans Friday to revise their current rules for dealing with Colorado River shortages and pursue a new agreement to achieve larger reductions in water use throughout the Southwest.

The Biden administration announcement represents a renewed push to scale back water use along a river that has shrunk significantly in the face of a 23-year [megadrought worsened by global warming](#).

With water levels dropping at Lake Powell, the Interior Department said operators of Glen Canyon Dam may need to release less water, which would affect flows in the Grand Canyon and accelerate the decline of Lake Mead. In order to protect public health and safety and the integrity of the system, the department said releases from Hoover Dam may also need to be reduced — which would shrink the amounts of water flowing to California, Arizona and Mexico.

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Federal officials in June called for the seven states that rely on the Colorado River to [come up with plans](#) to drastically reduce annual water diversions by about 15% to 25%

regionwide. But negotiations among the states [grew tense and acrimonious](#) and [didn't produce a deal](#).



CALIFORNIA

## More water restrictions likely as California pledges to cut use of Colorado River supply

Oct. 6, 2022

The Interior Department has the authority to step in and unilaterally impose larger cuts. But federal officials appear to be pushing for a consensus on shrinking the water take from the river rather than dictating reductions in ways that could further inflame tensions or lead to legal fights. This approach increases the pressure on the states to come up with a deal in the coming months or face federal intervention.

“The Interior Department continues to pursue a collaborative and consensus-based approach to addressing the drought crisis afflicting the West,” Interior Secretary Deb Haaland said in a news release. “At the same time, we are committed to taking prompt and decisive action necessary to protect the Colorado River System and all those who depend on it.”

Water from the Colorado River is used by about 40 million people, flowing to cities, farmlands and tribal nations from the Rocky Mountains to Southern California. The river has long been overallocated. So much water is diverted that the river’s delta in Mexico [largely dried up decades ago](#).

Lake Mead and Lake Powell, the river’s two largest reservoirs, now sit nearly three-fourths empty. Declining water levels are putting the dams’ ability to generate hydropower at risk.

Without major cuts in water use, the latest projections show growing risks of the reservoirs approaching “dead pool” levels, where water would no longer pass downstream.

The current system for dealing with shortages was established in operating rules dating to 2007, and a 2019 deal laid out a series of additional cutbacks as Lake Mead’s level declines.

The federal Bureau of Reclamation said it will publish a notice to prepare a “supplemental environmental impact statement,” which will include proposed alternatives for revising the 2007 rules. Those rules, called the interim guidelines, are set to expire after 2026, and negotiations on the next round of shortage-sharing rules have yet to begin.



CALIFORNIA

## As Salton Sea faces ecological collapse, a plan to save it with ocean water is rejected

Oct. 5, 2022

The Interior Department said in this “expedited” review process, officials will consider revising the current rules to “provide additional alternatives and measures needed to address the likelihood of continued low-runoff conditions.”

The Bureau of Reclamation plans to analyze options including what it calls a possible consensus-based “framework” agreement that would build on water reductions that the states and tribes have previously agreed to.

Another alternative would be for the Interior secretary to exercise federal authority to change reservoir operations. The Interior Department said this alternative would also “consider how the secretary’s authority could complement a consensus-based alternative that may not sufficiently mitigate current and projected risks.”

The department said the review will also consider the “no action” option of staying with the current rules and agreements. The agency will accept public input through Dec. 20.

Reclamation Commissioner Camille Calimlim Touton said these steps are necessary “to protect the Colorado River System and stabilize rapidly declining reservoir storage elevations.”

Touton said these measures will better protect reservoir levels and water supplies while long-term plans are developed to address “the climate-driven realities facing the Colorado River Basin.”

Scientists have estimated that about [half the decrease](#) in the river's flow since 2000 has been caused by unprecedented warming. This heat-driven contraction of the water supply is projected to worsen as temperatures continue to climb.

Scientists have warned that the West is undergoing climate-driven [aridification](#) and will have to adapt to hotter, drier conditions.

The Bureau of Reclamation is sending a signal to the states “that this is kind of their last opportunity for consensus-building, for voluntary action,” said Jaime Garcia, a water fellow at the University of Colorado Law School's Getches-Wilkinson Center.

Garcia said federal officials seem to be “covering their bases, building the paper trail for what I think is inevitable litigation” — touting their ability to act unilaterally to protect the system while also giving states, water agencies and others an opportunity to try to reach a deal.

“The fundamental issue is, whatever solution people come up with is going to hurt,” Garcia said. “The river is overallocated. It's drying up. And we have to find a way to sort of spread out the pain evenly.”



CALIFORNIA

**Facing 'dead pool' risk, California braces for painful water cuts from Colorado River**

Sept. 4, 2022

Negotiations among the states over additional cutbacks have been rife with tension and finger-pointing. In one of the latest barbs, Arizona Sen. Mark Kelly urged the federal government to [withhold money](#) for environmental projects at the Salton Sea until California, which uses the largest share of the river, commits to larger reductions.

Nevada and other states have urged the federal government to [start including evaporation losses](#) in the water accounting for states in the river's Lower Basin, which would translate into large water reductions for California and Arizona.

Tribes, which have rights to roughly one-fourth of the river's average supply, have also been [pushing to have more of a say](#) in talks among states and the federal government where they have long been largely excluded.

The Interior Department has [\\$4 billion available in drought mitigation funding](#) from the newly passed Inflation Reduction Act. Some of that money is expected to go toward paying farmers and others to forgo some of their water to boost reservoir levels.

As the reservoirs continue to decline, federal water managers realize that the 2026 deadline for negotiating new rules is too far ahead and that action is needed now, said Kyle Roerink, executive director of the Great Basin Water Network.

"This is a way to nicely, and within the confines of the law, spell out how painful of a process the federal government can impose on the states — rather than issuing an emergency declaration," Roerink said.

He said this sets up a framework for all parties to participate, while potential litigation remains in the background.

"They're putting all their cards on the table," Roerink said, and sending a clear message to the states: "Either get on board or sue us."

He added that it's a way to deal with the "[antiquated plumbing issues](#)" at Glen Canyon Dam, where federal water managers have acknowledged that if Lake Powell [drops below its minimum level](#) for producing power, they are unsure how the dam's infrastructure — in particular its four 8-foot-wide outlet pipes — would fare at those levels.

"This will likely be an effort to legitimize storing more water in the Upper Basin to prop up a dam that should have never been built in the first place," Roerink said. "Time is of the essence. This is better late than never. But it might be too little too late."



CLIMATE & ENVIRONMENT

**With California expected to lose 10% of its water within 20 years, Newsom calls for urgent action** ▶

Aug. 11, 2022

The latest forecast indicates [La Niña patterns will most likely persist](#) this winter, bringing conditions that often produce dry weather in the Southwest.

“We are in a dire situation,” said Tom Buschatzke, director of the Arizona Department of Water Resources. “I think regionwide every water user, every water use sector, every state has to reduce their water use.”

Arizona is already preparing for a 21% reduction in its Colorado River supplies next year, and farmers in parts of the state have been forced to leave fields dry and unplanted.

Buschatzke pointed out that the latest federal projections show a slight risk of Lake Powell falling to “dead pool” levels in 2024, which would stop the flow of water from Glen Canyon Dam into the Grand Canyon.

Buschatzke said he’s pleased to see the federal government taking this step. He said pressure from the federal government was key in securing previous deals in 2007 and 2019.

“We need a little bit of a stick,” Buschatzke said. “I actually wish they had started sooner.”

Earlier this month, four Southern California water districts sent the federal government a proposal [offering to reduce water use](#) by up to 400,000 acre-feet per year for the next four years, amounting to about 9% of their total allotment. While substantial, that offer remains far from the regionwide goal of 2 million to 4 million acre-feet that federal officials announced in June.

Mangers of the Metropolitan Water District of Southern California have been discussing plans for [mandatory conservation measures](#) next year to begin rationing water for cities and local agencies that supply 19 million people.

Talks between the states have grown “pretty acrimonious,” but the Interior Department’s stance could help kick-start the negotiations, said Bill Hasencamp, Metropolitan’s manager of Colorado River resources.

Federal officials have said they expect to issue a decision in July, meaning there is now a firm deadline with real consequences, Hasencamp said. “If we’re going to have a consensus plan, it’s got to be done by February or March.”

Hasencamp said he thinks the latest step by federal officials is what’s needed.

“They’re stepping up and showing leadership,” he said. “We’re willing to sit down and have those tough discussions. I think the other states are, too. We’re a lot better off if we can develop a plan rather than having it imposed on us.”

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Ian James

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Ian James is a reporter who focuses on water in California and the West. Before joining the Los Angeles Times in 2021, he was an environment reporter at the Arizona Republic and the Desert Sun. He previously worked for the Associated Press as a correspondent in the Caribbean and as bureau chief in Venezuela. He is originally from California.



Latest in Climate & Environment





## Western Water Coverage

Throughout the history of the American West, water issues have shown their ability to both unite and divide communities. As an imbalance between water supplies and demands grows in the region, KUNC is committed to covering the stories that emerge.

# Feds want the ability to cut back on Colorado River reservoir releases over the next two years

KUNC | By [Alex Hager](#)

Published October 28, 2022 at 4:46 PM MDT



*Ted Wood / The Water Desk*

Water levels are at record lows and still dropping in the nation's largest reservoirs. The federal government began the process of restricting water releases from Glen Canyon Dam, which holds back a shrinking Lake Powell

The federal government wants the ability to restrict the amount of water released from the nation's largest reservoirs, Lake Mead and Lake Powell, in 2023 and 2024. On Friday, the Interior Department began the process of revising existing guidelines for water management in the Colorado River basin. The river, which supplies 40



million people across the Southwest, is strained by a supply-demand imbalance and will likely shrink further due to climate change.

The Bureau of Reclamation, which manages dams at those reservoirs, filed a [Notice of Intent](#) Friday to propose changes to water releases. An upcoming Environmental Impact Statement will contain the details of those changes. The Bureau's plans will tweak river management rules drawn up in 2007 in response to declining reservoir levels at that time.

Those rules, known as the "Interim Guidelines" were meant to last until 2025. These potential changes to water released from the dams will join a patchwork of temporary reductions and conservation agreements that have been deployed to pull the basin back from the brink of catastrophe. Ongoing dry conditions brought on by warming temperatures have worsened beyond the expectations of many water managers, and steady demand is sapping the shrinking supply. States that use water from the Colorado River are [due to rewrite](#) management guidelines by 2026, when the current set expires.

"Today's action brings new ideas and necessary measures to the table as we consider alternatives to revise operations to better protect [the] Colorado River System in the near term while we also continue to develop long-term, sustainable plans that reflect the climate-driven realities facing the Colorado River Basin," said Bureau of Reclamation commissioner Camille Calimlim Touton in a press release.

The federal government has expanded its role in river management throughout the past year. Historically, Colorado River management decisions were largely left to the seven states that use its water, but worsening drought and state reluctance to cut back on demand ushered in more direct federal intervention. This summer, the Bureau of Reclamation threatened to force unprecedented cutbacks, but did not follow through after states [failed to meet](#) a federal deadline. Later, the Bureau launched a conservation program through which it will [pay farmers to use less water](#) using a chunk of the \$4 billion it received from the Inflation Reduction Act.

"The Interior Department continues to pursue a collaborative and consensus-based approach to addressing the drought crisis afflicting the West," said Interior secretary Deb Haaland. "At the same time, we are committed to taking prompt and decisive action necessary."

These tweaks are pitched as a means of making sure water can pass through Glen Canyon Dam normally. Dropping water levels in Lake Powell have [threatened hydropower production](#) at the dam, which supplies electricity to roughly 5 million people across seven nearby states. Lower levels mean lower power output, and if levels drop so low that air enters the hydroelectric turbines, they could be damaged.

Beyond hydropower worries, some [have raised concern](#) that water from Lake Powell may soon be unable to pass through rarely-used pipes in its dam at a sufficient rate, jeopardizing the flow of water to millions of people who depend on it downstream. The lowest set of pipes — which would serve as the only exit route for water once levels fall past 3,430 feet in elevation — are not big enough to carry sufficient water for the Upper Basin states of Colorado, Wyoming, Utah and New Mexico to satisfy their legal obligation. Lake Powell was at 3,529 feet at the end of September.

Lake Mead, which stores water for the Lower Basin states of California, Arizona and Nevada, is filled with water released from Lake Powell. Because of that, any changes at Lake Powell would be felt at Lake Mead and the section of Colorado River between the two, which primarily flows through Grand Canyon National Park. Reclamation says it may modify releases at the Hoover Dam, which holds back Lake Mead, “in order to protect Hoover Dam operations, system integrity, and public health and safety.”

Restricted releases for the Lower Basin would mean water users in California, Arizona and Nevada would have to conserve further.

*This story is part of ongoing coverage of the Colorado River, produced by KUNC and supported by the Walton Family Foundation.*

**Tags**[Environment](#)[Topic: Western Water Coverage](#)[Lake Powell](#)[Lake Mead](#)[Bureau of Reclamation](#)[Department of the Interior](#)[Colorado River Basin](#)**Alex Hager**

Alex is KUNC's reporter covering the Colorado River Basin. He spent two years at Aspen Public Radio, mainly reporting on the resort economy, the environment and the COVID-19 pandemic. Before that, he covered the world's largest sockeye salmon fishery for KDLG in Dillingham, Alaska.



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# Central Arizona Water Conservation District names Brenda Burman as Central Arizona Project's next general manager

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by Know Your Water News 📅 November 3, 2022

## *Longtime water leader to take CAP's top post*

(Phoenix, AZ, Nov. 3, 2022) – The Central Arizona Water Conservation District Board of Directors has announced that Brenda Burman will be Central Arizona Project's next general manager. Burman currently serves as the organization's executive strategy advisor.

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Burman joined CAP in 2021, advising on issues as the organization prepared for its first Tier 1 Colorado River shortage. In that regard, she drew upon her experience as commissioner of the Bureau of Reclamation from 2017 to early 2021. There, she dealt with the long-term drought on the Colorado River and in other Western river basins, as well as aging infrastructure, decreased supplies due to climate change and increasing environmental concerns.

"Arizona is facing huge challenges on the Colorado River and now more than ever CAP needs a leader who can step into the ongoing negotiations and advance our perspectives," says Terry Goddard, CAWCD President. "Brenda Burman is uniquely qualified for this position, bringing with her decades of experience with Arizona and water issues nationwide. We are pleased to hire her as CAP's first female general manager."

Burman has spent more than 25 years working with diverse partners to find durable, innovative solutions for water, energy and environmental challenges. She has worked across the water community in private legal practice, as the water and energy counsel for U.S. Senator Jon Kyl, as senior water policy advisor for The Nature Conservancy, and in senior positions for water districts, including the Metropolitan Water District of Southern California and Salt River Project.

Burman holds a bachelor of arts degree from Kenyon College in Ohio. After college, she worked as a park ranger at the Grand Canyon before earning her juris doctor degree from the University of Arizona College of Law.

"I am humbled and honored to be selected as Central Arizona Project's next general manager," says Brenda Burman. "During the past year I have worked alongside my CAP colleagues and with those throughout the Colorado River basin, and what needs to be done is clear to me; protect the water supply that nearly 6 million people in Arizona depend on. There is a lot to do and no time to waste. I will be focused on navigating the path for CAP through the next few years, which I believe will set the course for the next few decades."

Burman will replace outgoing General Manager Ted Cooke, who will be retiring on January 5, 2023. Cooke will remain as general manager until that time.

"Brenda Burman has been selected as the fifth general manager of CAP," says CAP General Manager Ted Cooke. "Her vast experience, coupled with her fresh perspectives, will help her take the reins and lead the organization through what will undoubtedly be some tough times. I am especially pleased to have worked with her this year so I know the transition will be as seamless as possible."

Burman will take over leadership of CAP as its general manager on January 6, 2023.



# The ugly story of how corporate America convinced us to spend so much on water

We're being packaged and sold a bottle/can/box of lies on water.

By Emily Stewart | Nov 3, 2022, 7:00am EDT



How corporate America turned a natural resource into a pricy commodity. | Amanda Northrop/Vox



Every now and again I **catch an ad** for miracle spring water, which promises to cure everything from laryngitis to debt. It's **fairly obviously a scam** seeking to separate people from their hard-earned money. Then again, the same goes for the **plastic water bottles** people buy at the convenience store every day, or the box of water or **can** of water that promises to be more environmentally friendly but **isn't especially**.

If you live in the United States, chances are that **the water coming from your faucet is perfectly fine to drink** (though there are, of course, **some exceptions**). The same goes for the glass that's sitting in your kitchen cabinet to drink it from. So why have we spent decades buying it packaged up?

Some of us try to be more climate- and budget-friendly by using a **metal tumbler**, but if you're anything like me, you probably have more of them than you need. (I'm not even sure how I've managed to accumulate so many of them — they

seem to be On Trend in corporate swag.) And what about that filter you might have on your faucet? Do you know what it's even filtering for, or whether that's in your water? And when was the last time you changed the filter anyway?

"We've gotten here, step by step, down a dangerous road of converting a public resource into a private commodity," said Peter Gleick, a scientist and expert on global water and climate and co-founder of the Pacific Institute, a research institution focused on water. "Water utilities don't have advertising budgets; private companies do."



## The Big Squeeze

We're all being squeezed by capitalism. Emily Stewart explains how.

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For years, we have fallen into a trap of paying to consume a natural resource that's generally widely available for very cheap or free.

As Gleick wrote in his 2010 book ***Bottled and Sold: The Story Behind Our Obsession with Bottled Water***, the way we've commercialized water is "a symptom of a larger set of issues," including the decline of public water systems that has led to distrust in those systems, advertising and marketing from brands happy to leverage that distrust, and "a society trained from birth to buy, consume, and throw away."

In an economic system where virtually everything can be packaged and sold, of course we're going to fall for it on water, just like we do everything else.

## The story of bottled water is part fear, part marketing, part laziness

The idea of individually packaged water hasn't always been a hugely popular thing in the United States. It started to be introduced through imports such as Perrier in the 1970s, explained Gary Hemphill, managing director of research at the Beverage Marketing Corporation, and was facilitated by the proliferation of **polyethylene terephthalate** (PET), the material plastic water bottles are made of.

"It was really the '90s where bottled water started to take off," Hemphill said. It's since grown to an "incredible juggernaut," **overtaking** carbonated soft drinks as the country's most popular beverage in 2016. Americans now buy **billions of plastic water bottles** each year.

Companies have a litany of tactics — and cash — to get people to buy, buy, buy. They position bottled water as a healthier alternative to sodas (which it is) and to tap water (which it often is not). They try to entice people with sleek imagery and promises of purity, positioning the packaging as sporty or sexy or extra-healthy or whatever the brand's schtick is.

"People view it as the ultimate health beverage," Hemphill said.

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*IN AN ECONOMIC SYSTEM WHERE  
VIRTUALLY EVERYTHING CAN BE  
PACKAGED AND SOLD, OF COURSE  
WE'RE GOING TO FALL FOR IT ON WATER*

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That's how you wind up with Jennifer Aniston shilling water that's "**smart because it's made that way**" and Dua Lipa telling you to "**drink true**," as though either of those phrases means anything. (Aniston is **no longer partnered with** SmartWater, which has gone on to **advertise with celebrities** such as Gal Gadot, Zendaya, and, inexplicably, Pete Davidson.)

The money to be made off of monetized water is also how you get boxed water that, if we're being honest here, often tastes weird, or whatever in the world a **\$700 million startup called Liquid Death** is doing with water in a can. Boxed and canned companies say, "Hey, at least we're not as environmentally bad as the bottled guys," even though that's **not really true**. They can be pretty equally problematic, climate-wise, all the while selling themselves as a "fix" to a bottled water problem that we've manufactured.

Water advertising campaigns can prove hugely influential, said Greg Donworth, who's done research on water at the Water Center at the University of Pennsylvania, not just for disposable water but also for high-end thermoses. "It's an addition of the clothing that we're wearing and the car that we're driving and everything of the sort, the brand of the bottle that we're toting around with us," he said.

There's a convenience component here, too. If you're out and about, it's really easy to pick up a bottle of water from the store around the corner. There often aren't functioning water fountains around — again, a decay of public infrastructure. Marketers have also done a good job of convincing us we have to **constantly be worried about dehydration**, and let's face it, sometimes people are just thirsty or, frankly, lazy. (I include myself in this latter category).

Underlying the rise of pre-packaged water is a deeper issue of fear — people do have some reasons to feel unease around what's coming out of their faucets.

"The efforts to sell bottled water have been helped by growing concern about the quality of our tap water, and that's in part due to the fact that our tap water isn't being protected as well as it ought to be," Gleick said.

Health-related worries are exacerbated by the fact that, by law, every time there is a problem with a public water system, the public has to be informed, which is why you sometimes hear about boil water notices. It is a good thing that people know when their water isn't safe to drink — just take a look at high-profile water crises in **Flint, Michigan**, and **Jackson, Mississippi**. It also increases everyone's worry about the quality of their tap water, even when in the vast majority of cases, there's no reason for concern.

What's more, there are no guarantees that the bottled water you're drinking is **actually safer**. **Sometimes it's not**, nor is it as **tightly regulated** as what's coming out of the tap. There are some water trends that can **genuinely make you sick**. But ... marketers would rather the public not think about that one too much.

"There's all sorts of claims for the health powers of specially modified water, and almost all of them are bogus," Gleick said. "The FDA, which is responsible for regulating bottled water, ought to do a much better job making sure that those claims are either valid or prohibited, because people get fooled and spend a lot of money, sometimes, for products that are snake oil."

## Dua Lipa isn't going to fix America's water problem, better infrastructure is

The idea that the water coming out of your faucet might be dangerous isn't just one the beverage industry takes advantage of — water filter companies do it, too. This isn't to say that water filters are never a good idea, but they're one more item consumers could stand to think about for a beat before buying.

"For the vast majority of water, filters either aren't needed because the things they filter out aren't present in our water or they don't filter out what we do need to filter out of our water," Gleick said.

He acknowledged that people do prefer to filter for taste — a personal choice — and that people in rural areas depending on wells or out of a municipal water system may want to filter, too. Still, before people buy a filter, they should know what that

filter is for and whether it's actually working on their water. There are kits and services that let you test your water, **sometimes even for free**, which is a good idea before buying a filter. "Otherwise you're wasting your money," Gleick said.

It's also worth noting that water filters have to be replaced — and when people don't, they can become a source of contamination.

Water has been turned into a highly commercial endeavor, and there are no easy answers on how to roll that back. A step in the right direction is to try to restore people's faith in the water coming out of their faucet — a faith that's, rightfully, been eroded over the years. "The first approach that needs to be taken is making it so people know that their water is safe to drink, that's the first behavioral bias that we have to get across," Donworth said.

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*"WE'RE NOT INVESTING IN NEW WATER SYSTEMS OR MAINTAINING OLD WATER SYSTEMS IN THE WAY WE NEED TO"*

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That means water utilities and state and local officials need to get the message out better. It also entails spending on infrastructure. "We're not investing in new water systems or maintaining old water systems in the way we need to, and that's part of the broader infrastructure debate in this country," Gleick said.

Grabbing a water at the corner store isn't the end of the world, but if you can avoid it, you should — the purchases of bottled water should be few and far between. And really, your tap water is probably fine. The next time you drink it, think about if it would be better in a can or if you were told it was distilled, or if you knew Rachel Green from *Friends* liked it. Pretend that's the case, and enjoy.

*We live in a world that's constantly trying to sucker us and trick us, where we're always surrounded by scams big and small. It can feel impossible to navigate. Every two weeks, join Emily Stewart to look at all the little ways our economic systems control and manipulate the average person. Welcome to **The Big Squeeze**.*

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Have ideas for a future column or thoughts on this one? Email [emily.stewart@vox.com](mailto:emily.stewart@vox.com).

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