

Citizens' Water Advisory Committee (CWAC) Agenda

May 9, 2023, 6:00 p.m.
Aspen Room, 2nd Floor, Aurora Municipal Center/Hybrid

Microsoft Teams Link:
[Click here to join the meeting](#)
or
<https://bit.ly/AuroraWaterAdvisoryCommittee>



Call in (audio only) - 720-388-8447
Phone Conference ID: 532 291 8#

Members: Angie Binder - Chair, Richard “Dick” Eason -Vice Chair, Jay Campbell, Tom Coker, Dennis Dechant, William Gondrez, Janet Marlow, David Patterson, Daniel Widrich

1. Approval of Minutes – April 11, 2023 Chair
2. Introductions/Public Invited to be Heard Chair
3. Communications Update Greg Baker
4. Consent items
 - a) 1st Quarter 2023 Financial Update Fernando Aranda
 - b) Capital Improvement Project of the Quarter - SEAM Sarah Young
5. Legislative Update Kathy Kitzmann
6. Colorado River Issues Overview Alex Davis
7. New/Old Business Chair
8. Review Follow-Up Questions Greg Baker
9. Confirm Next Meeting – Tuesday, June 13, 2023 Chair
10. Adjourn Chair

Citizens’ Water Advisory Committee (CWAC) Minutes
April 11, 2023, 6:00 p.m.
Aspen Room/Microsoft Teams

Members Present: Angie Binder – Chair, Dick Eason - Vice Chair, Jay Campbell (Teams), Daniel Widrich, Dennis Dechant, Tom Coker

Absent: Janet Marlow

Staff Present: Alex Davis, Alex Gagliardi, Greg Baker, Rory Franklin (Teams), Melina Bourdeau (Teams)

Visitors Present: None

The meeting was called to order at 6:10 p.m.

1. Approval of March 14, 2023 Minutes

The March 14, 2023, minutes were approved.

2. Introductions/Public Invited to be Heard

None.

3. Communications Update

G. Baker asked council members to start thinking about what tours they would like to take this year.

A. Binder asked what today’s announcement from President Biden means. A. Davis gave background information on the seven states that share water from the Colorado River and Mexico. Gave a brief description of how that may change due to the President’s announcement.

4. Storage Update

A. Davis provided an update on the status of water storage projects in the South Platte and Arkansas River Basins. Discussed Aurora Water’s twelve reservoirs in three basins, which are used to manage water supplies. Provided an overview of the capacities as well as current and future needs. The Water Department is working on six future storage projects - Wild Horse Reservoir, Box Creek, Recovery of Yield (ROY) Storage, South Platte Gravel Pits and Aquifer Storage and Recovery and East Reservoir.

T. Coker asked if we still mine gold at Box Creek and if there are mineral issues. G. Baker and A. Davis explained that there are still gold mining operations but do not know of any mineral issues at this point, that would take environmental studies to find out.

D. Eason asked if we have water rights at the East Reservoir location. Per A. Davis, not necessarily but we have storage rights.

5. Drought Messaging

The recent declaration moving Aurora into Stage I Water Availability (drought stage) required outreach with council constituents at ward meetings, HOAs/ metro districts and landscapers, and public engagement using traditional and digital media. G. Baker shared the presentation materials being used to equip CWAC members for their discussions with the community.

D. Eason asked what “average” is. A. Davis and G. Baker explained that it is a 30-year average that resets every 10 years.

A. Binder asked about water monitors and if there will be a hotline for people to call and G. Baker explained there already is one for people to call and ask questions.

7. New/Old Business

G. Baker asked if members had any suggestions for tours. Wildhorse will have to wait until later this summer due to Golden Eagle nesting.

D. Wildrich suggested anything close to or on the way to Wildhorse.

G. Baker explained the new credit card fees that will be going into effect in July or August.

8. Review Follow-Up Questions

None.

9. Confirm Next Meeting – Tuesday May 9, 2023.

The next meeting on May 9, 2023 was confirmed.

10. Adjourn

The meeting was adjourned at 8:14 p.m.

Angie Binder, Chair
Citizens’ Water Advisory Committee

Adopted: _____



To: Citizens’ Water Advisory Committee

Through: Marshall P. Brown, General Manager, Aurora Water _____

From: Dan Mikesell, Deputy Director (Interim), Water Financial Administration _____

Date: May 9, 2023

Subject: Quarterly Financial Report – First Quarter 2023

Highlights

Combined Operating revenues (Water, Sewer, and Stormwater) in the first quarter of 2023 were one percent lower than planned and 4.1 percent higher than the first quarter of 2022. In 2023, Aurora Water implemented rate increases of 4.0 percent, 5.0 percent, and 3.5 percent to the water, sewer, and stormwater service respectively.

Combined Development revenues (Water, Sewer, and Stormwater) in the first quarter of 2023 were 27.0 percent lower than planned and 40.0 percent lower than the first quarter of 2022. In 2023, Aurora Water implemented a 6.0 percent average increase in the water connection fees and 6.3 percent increase in the sewer connection fees. No increase was adopted for the stormwater development fees. Development in the first quarter of 2023 is effectively lower than previous years. Aurora Water will continue to monitor growth and evaluate if this reduction is temporary due to economic conditions or more permanent.

Total operating expenses (Water, Sewer, and Stormwater combined) in the first quarter of 2023, were \$13,488 or 0.03% higher than planned. The variance is mainly due to the \$7.5 million Pueblo Water lease agreement which will provide 9,000 acres feet of additional water as a source of drought mitigation during 2023.

Operating expenses, excluding the Pueblo Water lease agreement, were lower than planned. Personal Services were lower than planned by \$1.0 million due in large part to vacancy savings. Supplies and Services were lower than planned by \$4.7 million. Professional Services came in lower than planned primarily due to the Environmental Services Lead Service Line (LSL) replacement project being encumbered in capital. The \$3.0 million budget for the LSL project will be a technical move from Operating to Capital during the 2024 supplemental process. Utilities were \$1.5 million lower than planned due to lower than anticipated usage for Homestake and Pumping electricity. Purchased Vehicle and Equipment Replacement was lower than planned in the first quarter due to supply chain shortages causing delays.

Operating expenses, excluding debt service, were higher than 2022 (same period) by \$8.3 million or 26.5 percent due to the Pueblo Water lease agreement.

Statements showing the budget to actual results and the year-to-year comparison can be found at the end of this memo on pages 8 and 9. Capital details can be found on pages 6 and 7.

Water, Sewer, and Stormwater as of End of First Quarter					
Item	YTD Plan	2023	2022	Q1 2023 vs YTD Plan	Year Over Year Difference
Operating Revenue	\$44,516,837	\$44,197,473	\$42,447,171	(\$319,364)	\$1,750,302
Development Revenue	12,397,036	9,010,337	15,065,747	(3,386,699)	(6,055,410)
Bond Proceeds and Transfers	45,000,000	45,469,805	0	469,805	45,469,805
Interest Income	1,064,511	1,706,287	647,563	641,776	1,058,724
Total Revenue	\$102,978,384	\$100,383,902	\$58,160,481	(\$2,594,482)	\$42,223,421
Operating Expense	(\$39,380,832)	(\$39,394,319)	(\$31,135,882)	\$13,488	\$8,258,437
Capital Projects	(20,934,086)	(17,548,471)	(24,197,938)	(3,385,615)	(6,649,467)
Debt Service	(8,710,407)	(9,008,921)	(9,195,883)	298,514	(186,962)
Total Expense	(\$69,025,325)	(\$65,951,711)	(\$64,529,703)	(\$3,073,614)	\$1,422,008

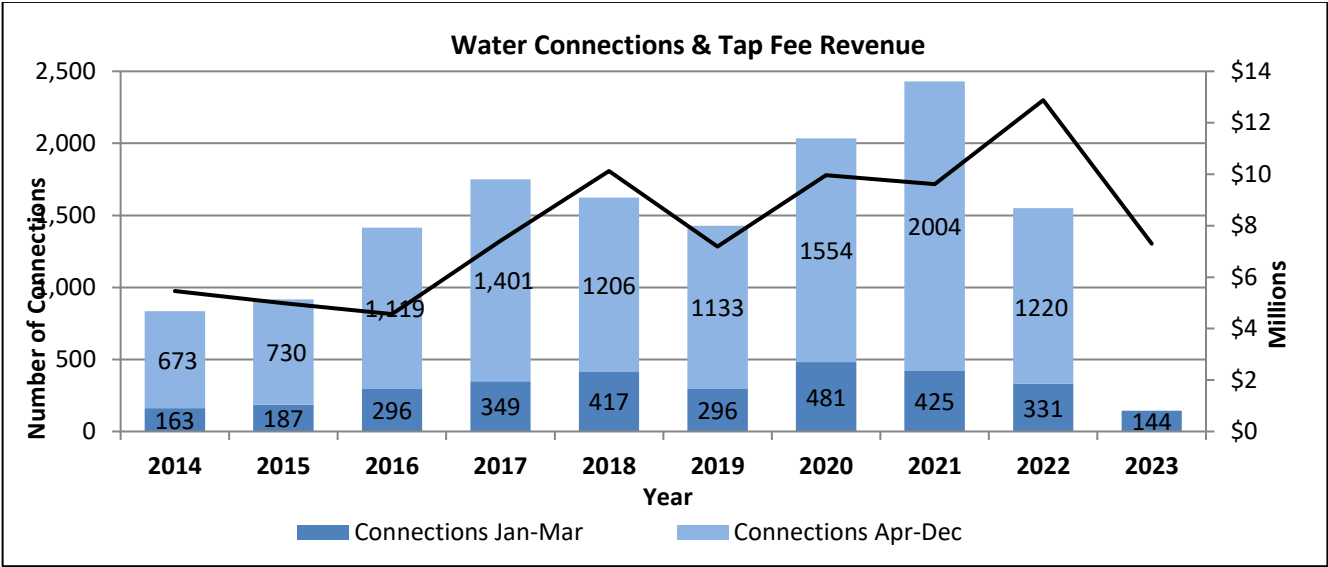
Cash Balances

Reserves and cash balances are shown in the table below. Total cash in the Water Fund decreased by \$22.9 million compared to the end of 2022. In the Wastewater fund total cash increased by \$38.2 million compared to year end 2022. In Water, the decrease is due to capital spending and seasonal cash inflows. In Wastewater the increase is due to the debt issuance of \$45 million.

	Water	Wastewater
Total Cash	\$243.2M	\$150.6M
Reserve & Commitment Type		
Debt Service Policy Reserve (next fiscal year debt payment)	\$28.9M	\$10.4M
Operating Reserve (25% of adopted operating budget excl debt service)	\$21.9M	\$16.4M
Water Resources Reserve (\$20 Million)	\$20.0M	
Capital Reserve (0.5% of Net Fixed assets)	\$10.5M	\$3.7M
Capital and Operating Encumbrances	\$115.9M	\$67.4M
Net Restricted Bond Proceeds for Projects	\$10.0M	\$5.3M
Pass-Thru Commitments (METRO and CC Basin)		\$1.6M
WISE Liability to Denver Water	\$5.0M	
Total Reserves and Commitments	\$212.2M	\$104.8M
Cash after Reserves & Commitments	\$31.0M	\$45.8M

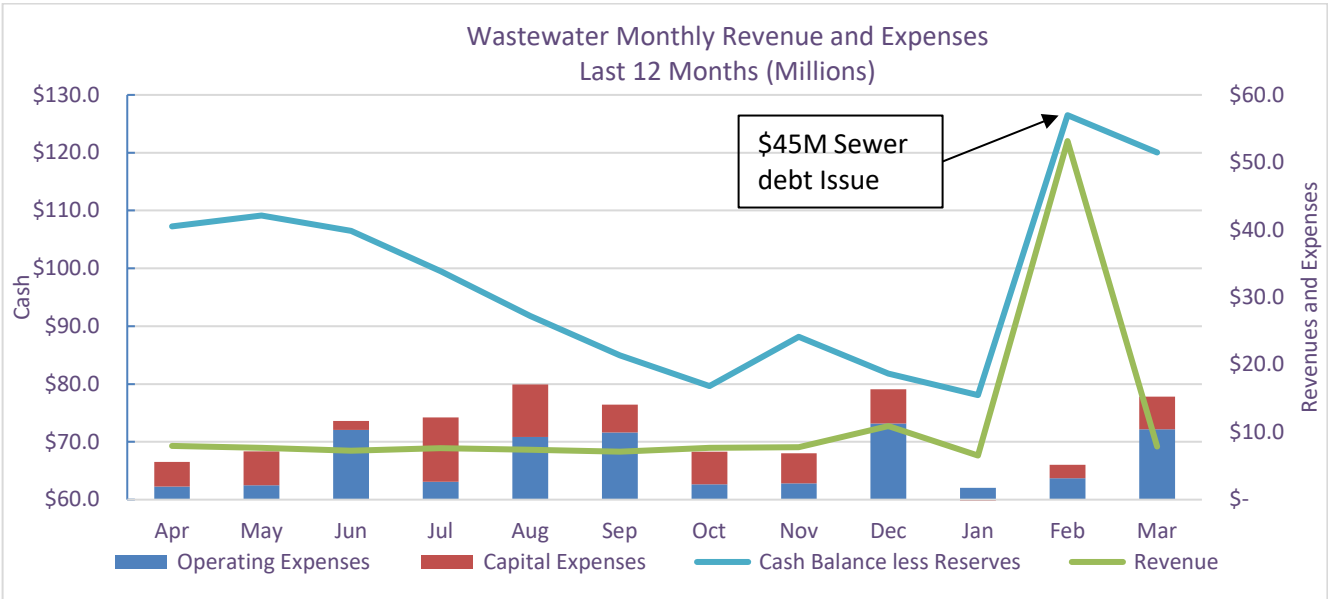
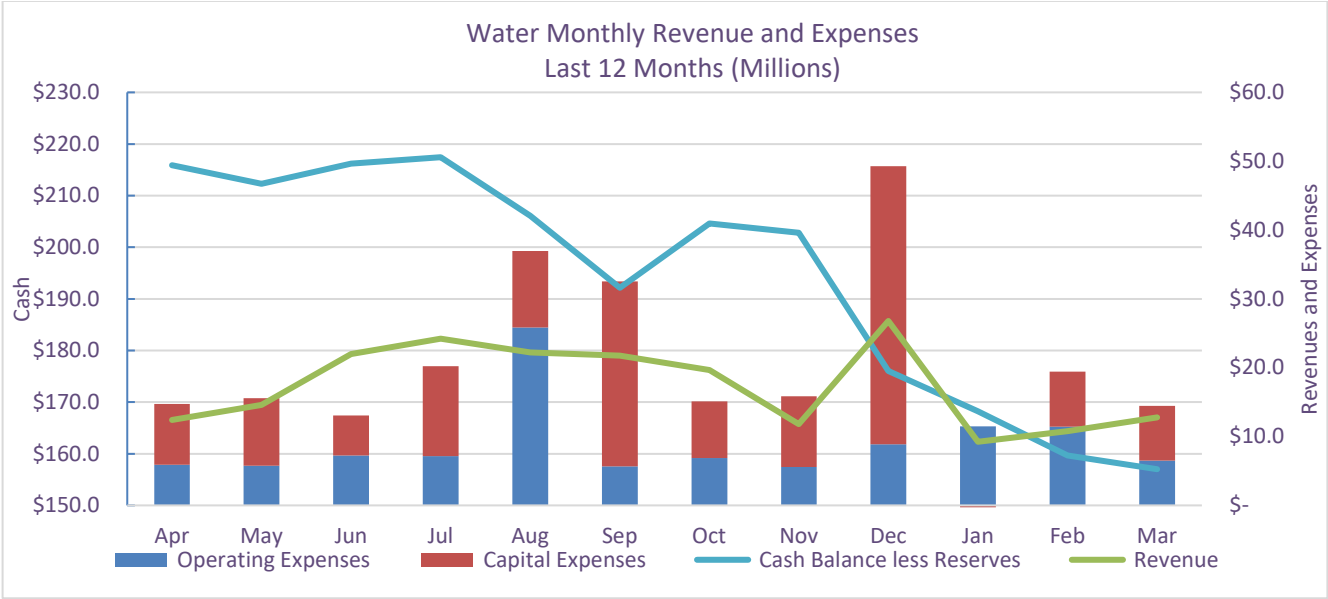
Water Connections

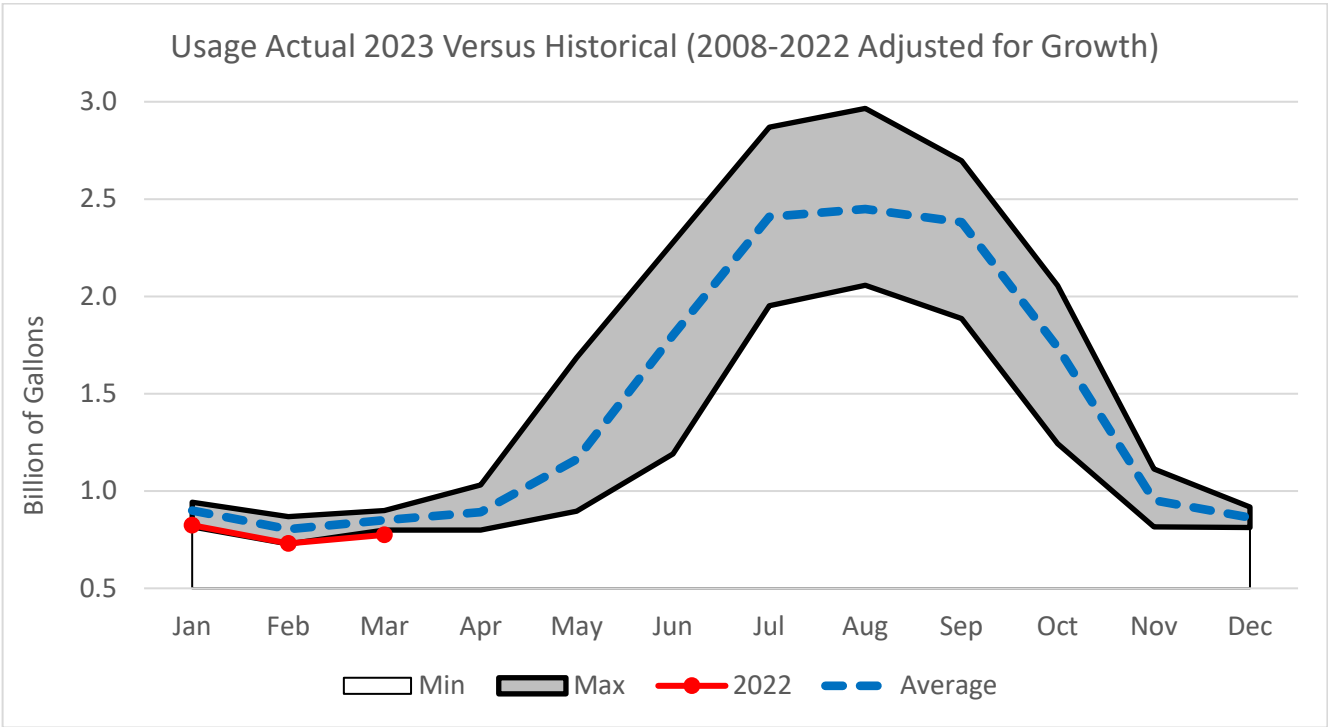
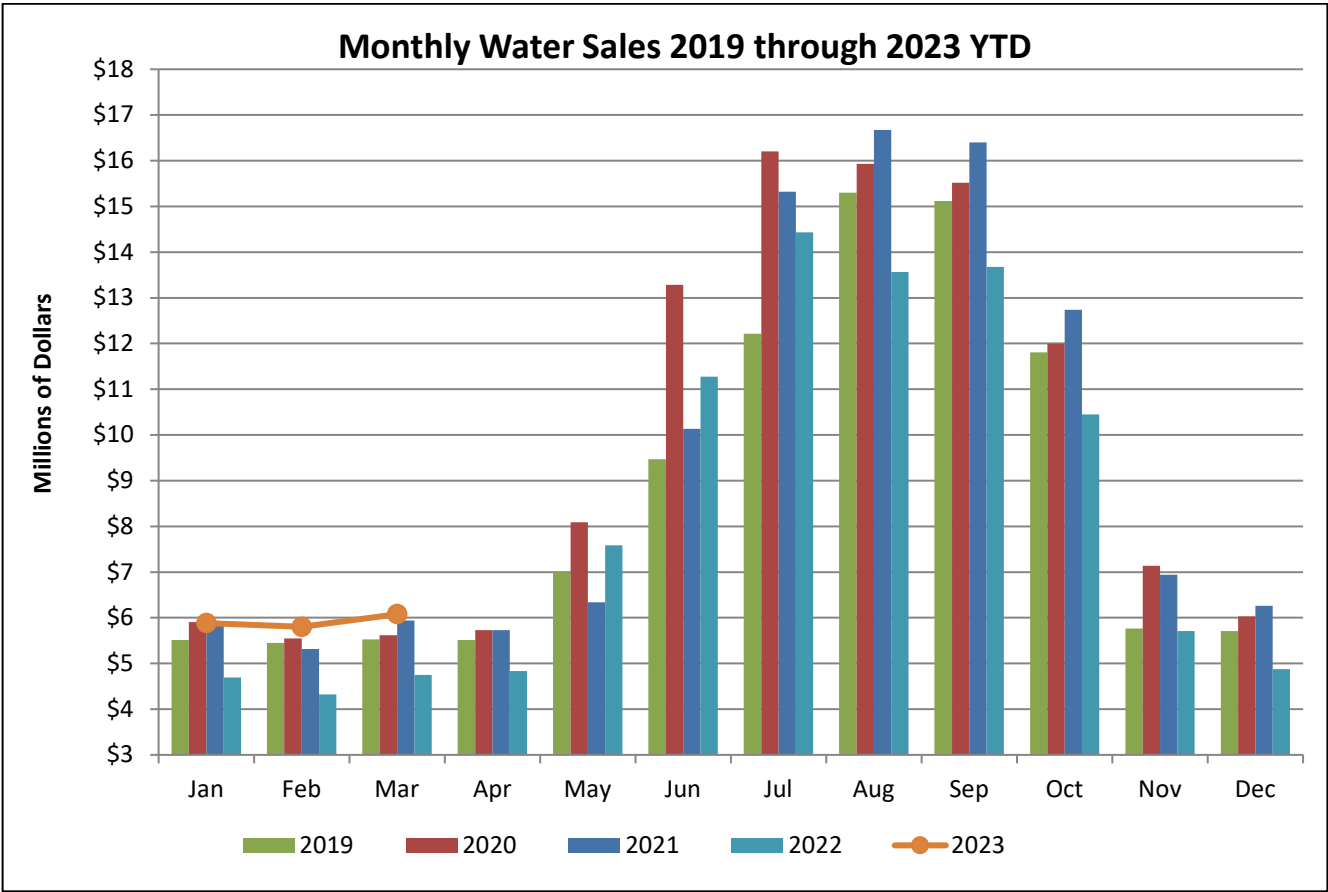
The total number of water connections (single-family, commercial, irrigation and multi-family) and the corresponding Water Connection Fee revenue for 2014-2023 are shown on the following graph. The number of water connections through the first quarter of 2023 decreased by 167 connections or 44 percent compared to the same period in 2022. Total water connection fee revenues in the first quarter of 2023 were \$2.3 million (24.1 percent) lower than in the first quarter of 2022. The first quarter of 2023 shows signs of a slowdown in new development likely due to increased interest rates and the possibility of a recession which has impacted new construction. Aurora Water will monitor growth in the upcoming month and evaluate projections as needed.



2022 Revenue, Expenses and Cash Flow

The following graphs present a summary of the last 12 months of monthly revenues, expenses, and cash flow.





Overall Capital Plan

Capital Projects Spending as of 03/31/2023				
Program	Working Budget*	YTD Spending Plan	YTD Actual Spend	Encumbered**
<u>Water CIP</u>				
Operations & General Management	27,674,024	4,212,261	4,096,118	17,588,515
Pumping	10,749,849	313,535	215	750,004
SOS Other	65,673,548	1,214,766	1,061,240	26,105,886
SOS Storage	49,275,262	377,959	90,302	6,212,772
SOS Water	50,584,402	286,292	489,562	7,798,873
Transmission & Distribution	53,238,230	2,229,404	2,410,068	27,871,425
Treatment	82,063,164	1,769,703	3,295,880	20,323,739
Water Total	339,258,479	10,403,920	\$11,443,385	106,651,214
<u>Sewer CIP</u>				
Collection	91,731,100	7,627,429	2,561,718	45,809,086
Operations & General Management	18,257,858	1,048,817	2,224,262	10,469,536
Sewer Total	\$109,988,958	\$8,676,246	\$4,785,980	\$6,278,622
<u>Stormwater CIP</u>				
Stormwater	25,812,489	792,719	496,264	4,628,153
Operations & General Management	3,898,861	1,061,201	822,841	2,887,730
Stormwater Total	29,711,350	\$1,853,920	\$1,319,105	\$7,515,883
Wastewater Total	139,700,308	\$10,530,166	\$6,105,085	\$63,794,505
Water & Wastewater Total	478,958,787	\$20,934,086	\$17,548,470	\$170,445,719

*Working budget includes adopted budget, carryforward, transfers, lapsed appropriations, and supplementals.

**Encumbered amounts are PO contracts that may carry multiple years.

Capital Projects Spending

Current economic conditions continue to affect the supply chain and labor force, as well as changing development plans, impacting utility corridors, and increasing permit timelines.

Total capital spending in the Water Fund through the first quarter was \$11.4 million, which was \$1.0 million more than the year-to-date spending plan of \$10.4 million. The Griswold Solids Handling System Improvements project was \$1.6 million more than planned in the first quarter due to the completion of excavation activities for both Basin 1 and Basin 2 earlier than anticipated. The Rampart Delivery System Expansion project was \$0.6 million less than planned in the first quarter due to delays in acquiring land

and easements. Design is scheduled to begin in the second quarter of 2023. Many of the projects in the Water Fund are encumbered for a total of \$106.6 million.

Through the first quarter, total capital spending in the Wastewater Fund was \$6.1 million, which was \$4.4 million less than the spending plan of \$10.5 million. In the Collection program, the Sand Creek 2 (SC2) & Sand Creek 5 (SC5) Sanitary Sewer Upgrade is \$1.2 million less than planned due to delays at SC2 caused by utility relocations. Construction for SC5 is still underway and the SC2 segment is planned to start in May 2023. This project is still on schedule to be completed by the end of 2023. The First Creek Interceptor Segments 1B-1D were \$3.1 million less than planned due to permitting delays early in the first quarter for Bid Package 1. Construction near Piccadilly is scheduled to begin early April 2023. Construction near 56th and Argonne for Bid Package 2 is scheduled to start April 2023. Many of the projects in the Wastewater Fund are encumbered for a total amount of \$63.8 million.

2023 Financial Comparison

The following table presents a comparison of budget to revenues and expenses through the First quarter for the year 2023.

WATER as of 03/31/2023				
Revenues & Expenses	Working Budget*	YTD Plan	YTD Actual (Accrual Basis)	% Actual to Plan
Operating Revenue	\$148,412,780	\$24,439,918	\$24,190,812	-1%
Development Revenue	55,830,696	10,590,048	7,489,973	-29%
Interest Income	2,953,044	738,261	1,150,810	56%
Total Revenue	\$207,196,520	\$35,768,227	\$32,831,595	-8%
Operating Expense	(\$93,559,432)	(\$22,804,582)	(\$25,063,817)	10%
Capital Projects	(339,258,479)	(10,403,920)	(11,443,386)	10%
Debt Service	(28,648,657)	(7,435,012)	(7,435,012)	0%
Total Expense	(\$461,466,568)	(\$40,643,514)	(\$43,942,215)	8%
Net Revenue & Expense	(\$254,270,048)	(\$4,875,287)	(\$11,110,620)	
SEWER as of 03/31/2023				
Operating Revenue	\$56,895,225	\$13,447,630	\$13,379,441	-1%
Development Revenue	6,996,140	1,336,592	1,112,559	-17%
Bond Proceeds and Transfers	45,000,000	45,000,000	45,469,805	1%
Interest Income	777,680	184,998	328,364	77%
Total Revenue	\$109,669,045	\$59,969,220	\$60,290,169	1%
Operating Expense	(\$50,897,261)	(\$12,541,099)	(\$11,705,184)	-7%
Capital Projects	(109,988,958)	(8,676,246)	(4,785,980)	-45%
Debt Service	(6,084,284)	(732,572)	(1,089,244)	49%
Total Expense	(\$166,970,503)	(\$21,949,917)	(\$17,580,408)	-20%
Net Revenue & Expense	(\$57,301,458)	\$38,019,304	\$42,709,761	
STORMWATER as of 03/31/2023				
Operating Revenue	\$26,517,166	\$6,629,289	\$6,627,220	0%
Development Revenue	2,500,000	470,396	407,805	-13%
Interest Income	565,000	141,252	227,113	61%
Total Revenue	\$29,582,166	\$7,240,937	\$7,262,138	0%
Operating Expense	(\$16,536,036)	(\$4,035,151)	(\$2,625,318)	-35%
Capital Projects	(29,711,350)	(1,853,920)	(1,319,105)	-29%
Debt Service	(2,421,183)	(542,823)	(484,665)	-11%
Total Expense	(\$48,668,569)	(\$6,431,894)	(\$4,429,088)	-31%
Net Revenue & Expense	(\$19,086,403)	\$809,043	\$2,833,050	

*Working budget includes adopted budget, carryforward, transfers, lapsed appropriations, and supplementals.

Year-to-date Comparison to Prior Year (Water, Sewer and Stormwater)

The following table presents a comparison of revenues and expenses through the First quarter for years 2023 and 2022.

WATER First Quarter Comparison			
Revenues & Expenses	2023	2022	% Change
Operating Revenue	\$24,190,812	\$23,755,510	2%
Development Revenue	7,489,973	13,091,531	-43%
Bond Proceeds and Transfers	0	0	0%
Interest Income	1,150,810	462,865	149%
Total Revenue	\$32,831,595	\$37,309,906	-12%
Operating Expense	(\$25,063,817)	(\$17,414,449)	44%
Capital Projects	(11,443,386)	(17,564,486)	-35%
Debt Service	(7,435,012)	(\$7,521,263)	-1%
Total Expense	(\$43,942,215)	(\$42,500,198)	3%
Net Revenue & Expense	(\$11,110,620)	(\$5,190,292)	
SEWER First Quarter Comparison			
Operating Revenue	\$13,379,441	\$12,563,903	6%
Development Revenue	1,112,559	1,723,774	-35%
Bond Proceeds and Transfers	45,469,805	0	0%
Interest Income	328,364	95,942	242%
Total Revenue	\$60,290,169	\$14,383,619	319%
Operating Expense	(\$11,705,184)	(\$11,444,852)	2%
Capital Projects	(4,785,980)	(4,332,452)	10%
Debt Service	(1,089,244)	(\$1,063,956)	2%
Total Expense	(\$17,580,408)	(\$16,841,260)	4%
Net Revenue & Expense	\$42,709,761	(\$2,457,641)	
STORMWATER First Quarter Comparison			
Operating Revenue	\$6,627,220	\$6,127,758	8%
Development Revenue	407,805	250,442	63%
Bond Proceeds and Transfers	0	0	0%
Interest Income	227,113	88,756	156%
Total Revenue	\$7,262,138	\$6,466,956	12%
Operating Expense	(\$2,625,318)	(\$2,276,581)	15%
Capital Projects	(1,319,105)	(2,301,000)	-43%
Debt Service	(484,665)	(\$610,664)	-21%
Total Expense	(\$4,429,088)	(\$5,188,245)	-15%
Net Revenue & Expense	\$2,833,050	\$1,278,711	

Capital Improvement Project of the Quarter SEAM

Background

The Southeast Area Maintenance (SEAM) will provide Aurora Water a workplace to provide water, stormwater, & wastewater services to the public. Eidos Architects designed the structure over a three-year span. Saunders Construction has managed the construction over the past two years. The public lobby has an interactive display and adjoining educational facilities. The complex consists of offices, work space and meeting space for over 500 employees. Other functions include shops, laboratories, storage space, vehicle maintenance & wash bays, a fueling island, a water meter test bench room, and outdoor material bins. The site adjoins the Pronghorn Reserve and features a major solar powered collector system, and a bank of electric vehicle charging stations. The facility is anticipated to open in September of 2023.

Scope of Work

The project cost including design, engineering, and construction is \$138 Mil. The project consists of 371,000 square feet of space on a 60 acre site located at 16791 East Quincy Avenue. Four structures on the site include: 273,000 sf Aurora Water Office Building, 35,000 sf Warehouse & Trades Building, 15,000 sf Fleet Maintenance shop, and a 48,000 sf Storage Building.



MEMORANDUM



City of Aurora

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TO: Citizens' Water Advisory Committee

THROUGH: Marshall P. Brown, General Manager, Aurora Water
Greg Baker, Manager of Public Relations

FROM: Kathy Kitzmann, Water Resources Principal

DATE: May 9, 2023

SUBJECT: 2023 State Legislative Review

The first regular session of the 74th Colorado General Assembly convened on January 9th and is scheduled to adjourn on May 8th. At the time of this writing, the legislature has one week left in the session and has introduced 612 bills plus 61 resolutions/memorials. Aurora Water is tracking about 57 introduced bills and 2 resolutions. Following are a few highlighted bills:

[SB23-213](#) *Land Use*. SB23-213 is a major affordable housing bill led by Governor Polis. The introduced bill required local governments to adopt model codes to increase higher density housing options or to develop new local zoning and building codes to meet state minimum standards. The Department of Local Affairs would expand to create model codes and create methodologies for assessing and planning residential housing needs. The introduced bill also required municipal water providers to conduct a water loss audit. The City of Aurora took an actively oppose position and City departments have been reviewing relevant amendments as this massive bill shape shifts. With over 100 amendments drafted and 37 amendments passed and counting, the final bill should be dramatically different from what was introduced.

[SB23-270](#) *Projects To Restore Natural Streams*. SB23-270 creates an exemption from the prior appropriation system for minor stream restoration activities. Minor stream restoration activities are defined as stabilizing banks, mechanical grading of ground surface along a natural stream, stabilizing an ephemeral or intermittent stream, daylighting a piped stream, or installing wildfire or flood mitigation structures. This bill was controversial upon introduction and thereafter amended to remove the exemption for projects in the flood plain areas and leaving only the minor stream restoration activities. Aurora Water was with many water providers in wanting to remove barriers for beneficial stream restoration projects as well as protect the City's water supplies from projects that may injure vested water rights. The current amended bill has wide acceptance and is expected to pass in the remaining few days of the session.

[SB23-274](#) *Water Quality Control Fee-setting By Rule*. The Water Quality Control Commission (WQCC) assesses fees on a variety of industries for pollution discharge permits and for other water-related activities. Fees are currently set in statute and range from under \$100 to more than \$35,000 depending on the sector and the regulated activity. The bill requires WQCC to engage with stakeholders and to set the fees by rule by October 31, 2025. The existing fees remain in place until January 1, 2026, unless the commission adopts rules to phase-in the new fees earlier. The bill requires CDPHE to submit an annual fee report to the General Assembly, changes the WQCC membership, and other changes to the administration of water quality fees. Members of the regulated community, including Aurora Water, worked to amend this bill to have better representation on the WQCC. The current amended bill is expected to pass.

[SB-295 Colorado River Drought Task Force](#). The bill creates the temporary Colorado River Drought Task Force to develop legislative recommendations that will provide tools to address drought and interstate commitments in the Colorado River Basin. The task force is comprised of representatives from state agencies, local governments, tribal representatives, water engineers, agricultural and environmental interests, and other stakeholders. The task force may hold up to 12 meetings during the 2023 legislative interim and must submit a final report to the Water Resources and Agriculture Review Committee by December 15, 2023, outlining all the recommendations that were considered and approved and a summary of the task force's work. The task force is repealed July 1, 2024. Aurora Water and other water providers have worked to amend SB23-295 for more inclusive representation state-wide and less prescriptive outcome language. The bill may get amended further as it continues through the legislative process.

After this 2023 legislative session ends, there will be the legislative Interim Water Resources and Agricultural Review Committee (now year-round per [SB23-010](#)) and Interim Wildfire Matters Review Committee that will focus on a few items to bring forth in the 2024 session. Colorado Water Congress and Water Education Colorado hosted [Demystifying Water \(presentation video & slides\)](#) informational legislator workshops on Colorado River Compact, Agricultural Water, and Municipal Water with future workshops being planned.

Aurora Water also monitors state ballot initiatives and state court cases that may impair or enhance the ability to provide safe, dependable and sustainable water, sewer, and stormwater services for today and the future. Currently, there are no ballot initiatives of concern, but there is one court case that Aurora Water is following along with Colorado Water Congress and other water providers. *Hill v. Warsewa* is a fishing access dispute that was filed in 2018. The complaint included a claim that a portion of Arkansas River was the property of the State of Colorado and "to be held in trust for the public". Arguments revolve around a federal standard of navigability to river access and if the disputed section of river was used for commerce, such as beaver pellets or tree products/materials being floated, when Colorado became a state in 1876. A determination in favor of Public Trust may create a conflict with Colorado's Prior Appropriation Doctrine. Colorado Water Congress has additional information on both water related ballot initiatives and the *Hill v Warsewa* case at <https://www.cowatercongress.org/ballot-issues.html> .

MEMORANDUM



City of Aurora

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To: Citizens' Water Advisory Committee

Through: Marshall P. Brown, General Manager of Aurora Water

From: Alexandra Davis, Deputy Director of Water Resources

Date: April 28, 2023

Subject: Colorado River Update

Purpose:

To provide a brief update on various issues and events related to the Colorado River.

Action Required:

No action at this time is required. This presentation is purely informative in nature.

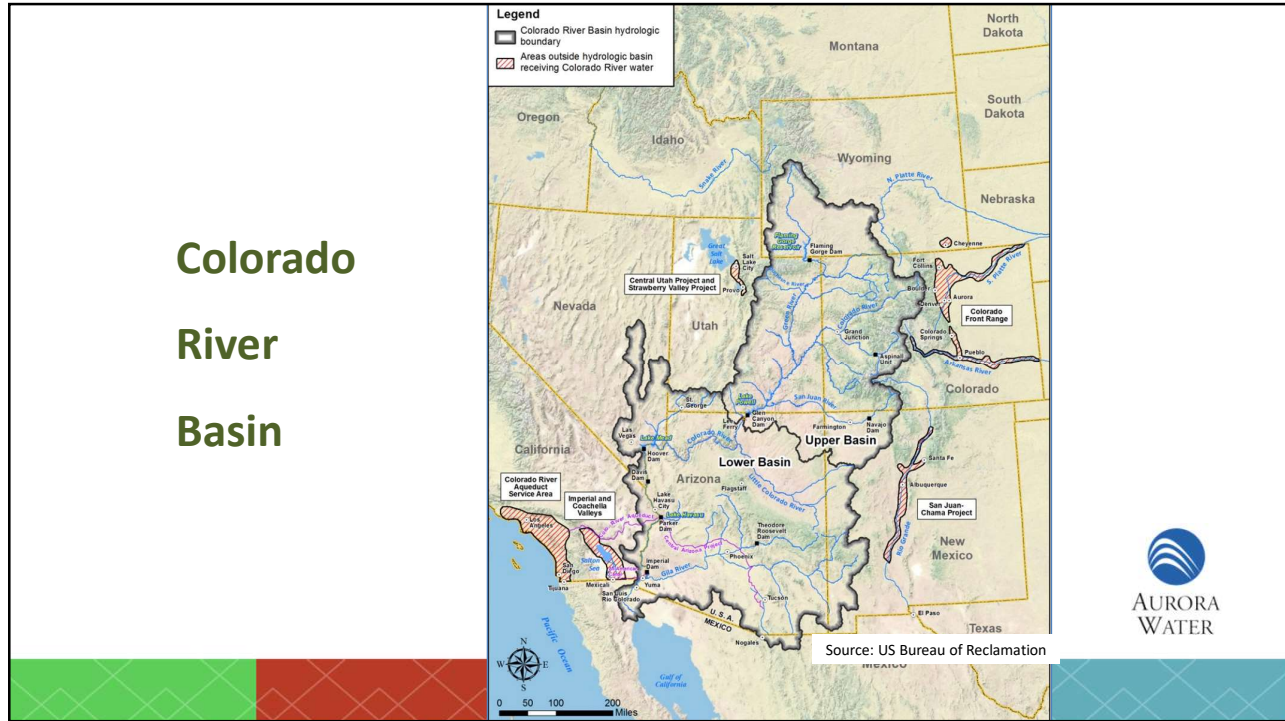


1



2

Colorado River Basin



3

Interstate Compact

U.S. Constitution – Article I, Section 10, Paragraph 3:

No State shall, without the Consent of Congress enter into any Agreement or Compact with another State...

- Interstate compacts allow States to agree to allocations of water through negotiation (vs. litigation) usually with help of chosen experts.
- Interstate compacts are
 - State Law
 - Federal Law



4

Law of the Colorado River

The body of law that affects and controls the interstate and international use, management, and allocation of water in the Colorado River System -which includes:

- The 1922 Colorado River Compact,
- The Mexican Water Treaty of 1944,
- The 1948 Upper Colorado River Basin Compact,
- Several United States Supreme Court decisions - most significantly The Consolidated Decree of the Supreme Court in *Arizona v. California*, and
- Various federal laws and administrative regulations including the Boulder Canyon Project Act of 1928, the Colorado River Storage Project Act of 1956, the Colorado River Basin Project Act of 1968, the Long Range Operating Criteria, and the Grand Canyon Protection Act of 1992,



5

COLORADO RIVER COMPACT

November 24, 1922

Signatory States: AZ, CA, CO, NV, NM, UT and WY

Primary Provisions

- Divides Colorado River Basin into the Lower Basin (California, Arizona, Nevada) and the Upper Basin (Colorado, Utah, New Mexico, Wyoming) at Lee Ferry, Arizona.
- Allocates 7,500,000 acre-feet of consumptive use to each basin per annum.
- Provides for Mexican allocation, first from surplus waters above the 15,000,000 acre-feet per year, and secondly splits obligation equally between the basins.
- Provides that Upper Basin shall not deplete 75,000,000 acre-feet in each consecutive 10-year period.



6

UPPER COLORADO RIVER COMPACT

October 11, 1948

Signatory States: AZ, CO, NM, UT & WY

Primary Provisions

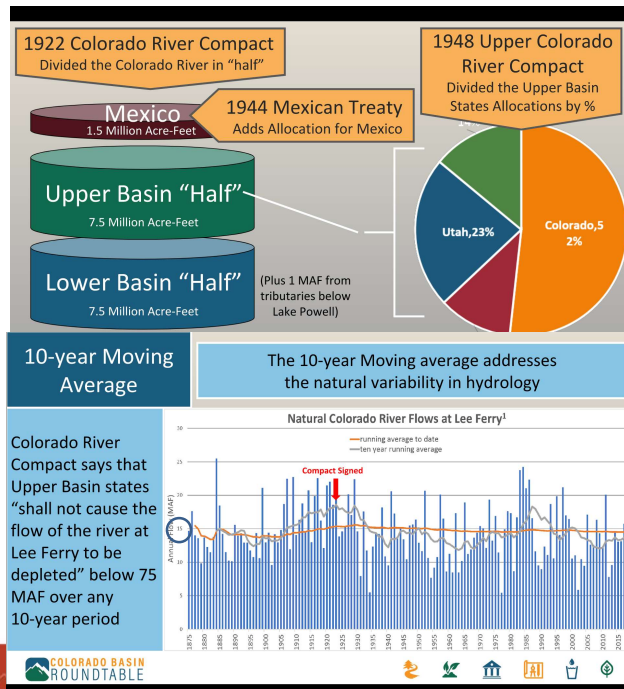
- Water apportionment as follows:
 - Arizona 1st 50,000 acre-feet/yr.
 - Colorado 51.75% New Mexico 11.25%
 - Utah 23.00% Wyoming 14.00%
- Lower Basin call- curtailment determined as follows:
 - Curtailment extent and time shall assure full compliance with CR Compact.
 - States shall make up any overdraft first.
 - Curtailment -same ratio as beneficial use during prior year
 - Excludes rights which predate November 24, 1922.



7

The basic story of the Colorado River:
Over-Allocation

$$7.5 + 7.5 + 1.5 = 16.5$$



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Steps towards balance

- **2003 Quantification Settlement Agreement**
 - Brought CA within its 4.4 maf allotment
 - Ag – Urban transfers
- **2007 Interim Guidelines**
 - Authorized “Intentionally Created Surplus” for storing water in Mead
 - Determined official shortage levels that would require delivery cuts. (required in 2022)
- **2019 Drought Contingency Plan**
 - More aggressive triggers for delivery cuts in Lower Basin (required in 2020)
 - Plan for a plan in the Upper Basin (Demand Management pool)



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2007 Interim Guidelines

- Set criteria for shortages in the Lower Basin
 - Below elevation 1075 feet – 333,000AF
 - Below elevation 1050 feet – 417,000AF
 - Below elevation 1025 – 500,000AF
- Assumes Mexico will provide additional shortage savings.
- Created ability for Lower Basin states to “bank” water (Intentionally Created Surplus or ICS).
- Allowed for additional conservation; System efficiency improvements, Importation of non-System water.
- Specified coordinated operating criteria for Lake Powell and Lake Mead
- Designed to avoid UB curtailment and reduce impact of LB shortages under low water supplies.



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Drought Contingency Plans

- The 2007 Interim Guidelines are insufficient to protect against reservoirs declining to critically low elevations if dry conditions persist or worsen.
- Intended to reduce likelihood of reaching critical reservoir elevations at Lake Powell and Lake Mead.
- Supplemental to and in furtherance of the goals of the 2007 Interim Guidelines.

Upper Basin DCP

Only affects operations above Lee Ferry

1. Agreement for Drought Response Operations at the Initial Units of the Colorado River Storage Project Act (DROA) and
2. Agreement Regarding Storage at Colorado River Storage Project Act Reservoirs Under an Upper Basin Demand Management Program (Demand Management)

Lower Basin DCP

only affects operations below Lee Ferry

1. DOI to implement LB programs to create or conserve 100,000 acre-feet annually or more to conserve water in Lake Mead and other Lower Basin CR reservoirs
2. SNWA, NV and MET agreed to make up to 100,000 AF of storage space available
3. Each State agreed to take shortages



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UB DCP Drought Response Operations Agreement

Navajo Reservoir



Flaming Gorge Reservoir



Blue Mesa Reservoir



Lake Powell

- Agree on process for developing operational plans to implement based on specific triggers to help maintain minimum power pool elevation at Lake Powell
- By conserving water (temporarily) in Lake Powell or moving water available (and subsequently recovering the storage) from upper CRSP facilities



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UB DCP Demand Management Storage Agreement

- Secure ability to use unfilled storage space in CRSPA Initial Units to continue compliance with compact obligations.
- Provide foundation on which the Upper Basin may explore and potentially develop a demand management program in the future.
 - For any demand management to be effective, multi-year storage is required.
 - Water must be conserved and stored over several years to provide a meaningful benefit.

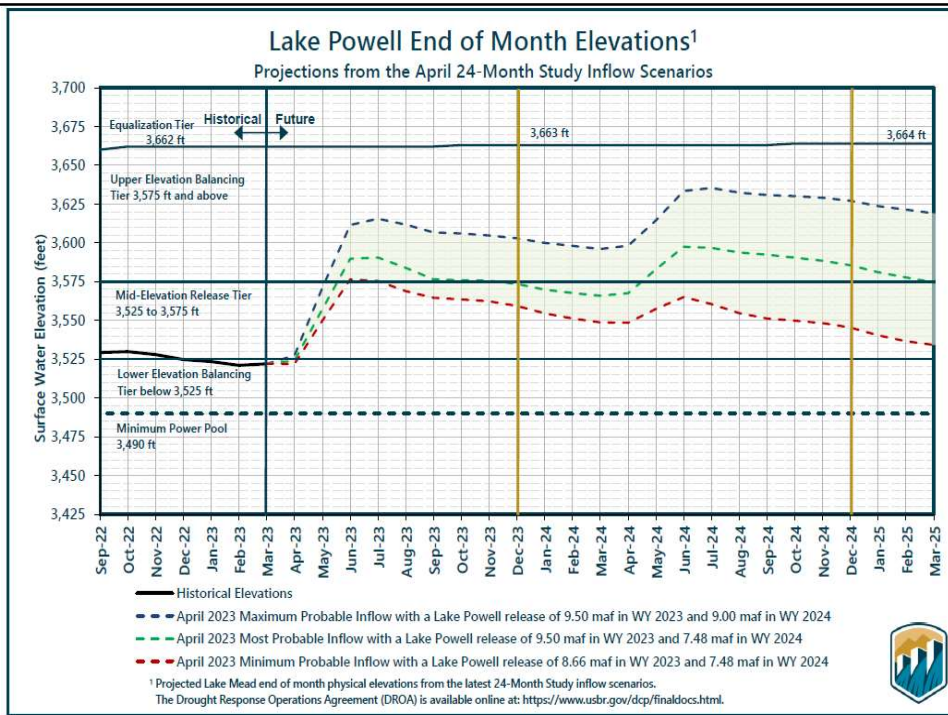
To approve a program

- The UCRC must:
 - find demand management activities necessary to assure compact compliance;
 - approve UB Demand Management Program;
- consult with the Lower Basin States
- enter into an agreement with DOI and
- formally approve the program.

Each state must determine demand management is feasible.



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Supplemental Environmental Impact Statement (SEIS)

- Draft SEIS released on April 11
- ROD for the SEIS will be issued late summer.
- Operations anticipated to start in 2024 operating year (Oct 1 for Powell operations and Jan 1 for Mead operation)
- Reclamation indicated that operations may need to be revisited and refined for 2025 and 2026



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SEIS Alternatives

- Reclamation identified 3 alternatives
 - No Action
 - Alternative 1
 - Alternative 2
- Reclamation hasn't identified a preferred alternative. That will be identified in the ROD
- Common to all alternatives
 - No changes to operations in the Upper Tier and Equalization Tier
 - DCP contributions based on projected Jan 1, 2024 Mead contents from Aug 24-month study
 - Powell can be operated with all available river outlet works



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SEIS No Action Alternative

No Action alternative consists of:

- Continued operations of the 07 IG
- 2007 ROD shortages and DCP contributions (max of 1.1 MAF not including Mexico shortages)
- Operational tiers and Powell releases based on Aug 24-month study projections of Jan 1 reservoir elevations
- Mid-yr review based on final April 1 final forecast can occur that can modify the AOP



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SEIS Alternative 1

Alternative 1 consists of the following:

- Additional LB shortages of 983 KAF in 2024 and 2.9 MAF in 2025-2026 distributed **based on priority** among CA, AZ, and NV
- Total shortage in 2024 limited to 2.083 MAF (max from 07 FEIS)
- Powell mid and lower tiers are combined into 1 tier, **with an upper elevation of 3,575' (8.9 MAF)**
- If Jan 1 projected Powell contents < 3,575', initial Powell release set at 6 MAF and adjusted based projected end of year contents:
 - Powell > 3,575' release 8.23 MAF
 - Powell between 3,550' and 3,575' release 7.48 MAF
 - Powell between 3,525' and 3,550' release 7.0 MAF
 - Powell between 3,500' and 3,525' release 6.0 MAF
 - Powell below 3,500' then reduce release to maintain 3,500' at end of year



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SEIS Alternative 2

Alternative 2 consists of the following:

- Powell operations are the same as Alternative 1
- Additional LB shortages of 983 KAF in 2024 and 2.9 MAF in 2025-2026 distributed **pro-rata** among CA, AZ, and NV
- If additional shortage is 1 MAF (13% of 7.5 MAF), then a shortage of 13% is applied to CA, AZ, and NV based on current water use



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Table 2-8
Comparison of Alternatives

Alternative	Shortage Guidelines (Section 2. Determination of Lake Mead Operation during the Interim Period)	Coordinated Reservoir Operations (Section 6. Coordinated Operation of Lake Powell and Lake Mead during the Interim Period)	Implementation of Guidelines (Section 7. Implementation of Guidelines)
No Action Alternative	<ul style="list-style-type: none"> • Shortages from Lake Mead (that is, reduced deliveries to Lower Basin water users) and DCP contributions of 200,000 af at 1,090 feet to 1.1 maf below 1,025 feet • Shortages are distributed across Lower Basin water users according to priority. 	<ul style="list-style-type: none"> • Below 3,575 feet at Lake Powell, either reduce Lake Powell releases or balance volumes depending on elevations at Lake Powell and Lake Mead. 	<ul style="list-style-type: none"> • Mid-year review may adjust the Lake Powell operational tier up or down or reduce shortages from Lake Mead (allow additional deliveries to Lower Basin water users).
Action Alternative 1	<ul style="list-style-type: none"> • 2024 shortages from Lake Mead and DCP contributions of 400,000 af at 1,090 feet to 2,083 maf at or below 1,040 feet • 2025–2026 shortages from Lake Mead and DCP contributions of 400,000 af at 1,090 feet to 4,000 maf below 950 feet • Shortages are distributed across Lower Basin water users according to priority. 	<ul style="list-style-type: none"> • Below 3,575 feet at Lake Powell, set initial release at 6.0 maf and adjust to as high as 8.23 maf based on the April end-of-water-year elevation projection. • Below 3,500 feet at Lake Powell in any month, reduce releases (gains equals losses) such that Lake Powell ends the operating year at 3,500 feet. 	<ul style="list-style-type: none"> • Mid-year review may adjust the Lake Powell operational tier up or down or reduce or increase shortages from Lake Mead (allow additional or reduced deliveries to Lower Basin water users).
Action Alternative 2	<ul style="list-style-type: none"> • Total shortages and DCP contributions for Lower Basin water users are the same as under Action Alternative 1. • Shortages are distributed in the same percentage across all Lower Basin water users. 	<ul style="list-style-type: none"> • Same as Action Alternative 1 	<ul style="list-style-type: none"> • Same as Action Alternative 1

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Coming up next

1. Colorado restructure/creation of State Colorado River Team
2. East Slope v. West Slope conflict continues
 - a. Colorado River Task Force
3. 2007 Guidelines Renegotiation
 - a. Expire December 31, 2025
 - b. Issues will likely include:
 - "Balancing"
 - Sustainability
 - System losses
 - Shortages or Lower Basin Reductions
 - Tributaries
 - Tribal rights
 - Demand Management (UT & NM v. CO?)
 - Compensation for conservation.
 - Preservation of existing rights



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