Citizens' Water Advisory Committee (CWAC) Agenda

April 11, 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 – March 14, 2023	Chair
2.	Introductions/Public Invited to be Heard	Chair
3.	Communications Update	Greg Baker
4.	Storage Update	Rich Vidmar
5.	Drought messaging	Greg Baker
6.	New/Old Business	Chair
7.	Review Follow-Up Questions	Greg Baker
8.	Confirm Next Meeting – Tuesday, May 9, 2023	Chair.
9.	Adjourn	Chair

Citizens' Water Advisory Committee (CWAC) Minutes March 14, 2023, 6:00 p.m.

Aspen Room/Microsoft Teams

Members Present: Angie Binder – Chair, Dick Eason - Vice Chair, Janet Marlow, Jay

Campbell (Teams), Daniel Widrich, Dennis Dechant, Tom Coker (Teams)

Absent: None

Staff Present: Alex Davis, Alex Gagliardi, Greg Baker, Rory Franklin, Rich Vidmar, Matt

Ashley, Carrie Stovall, John Clark

Visitors Present: None

The meeting was called to order at 6:01 p.m.

1. Approval of February 14, 2023 Minutes

The February 14, 2023, minutes were approved with amendments.

2. Introductions/Public Invited to be Heard

None.

3. Communications Update

G. Baker noted that staff has begun outreach on the drought stage declaration and had scheduled to present at multiple ward townhall meetings. Conservation was holding three town halls targeting HOAs, Metro Districts and landscapers. He also highlighted the drought resource webpage at AuroraGov.org/Drought. Council asked that we include details showing why Aurora is in drought stage when the rest of the state is doing well in snowpack. J. Marlow suggested that a presentation should also be made to the local realtor associations and to the Aurora Chamber of Commerce. D. Widrich asked how day-of-week restrictions would impact large properties on the watering variance program. G. Baker stated that while variance program participants are exempt fo day-of-week restrictions, they do have "allowance" or variance allocation that is applied to their account to ensure that they are watering efficiency. That allocation will be reduced by 20% to achieve the target goal for the drought stage.

R. Franklin updated the committee on recent proposed regularity levels for PFAS recently released by the EPA. Staff are still reviewing the proposed levels to understand the impact on Aurora's system.

4. Wild Horse Reservoir Update

R. Vidmar and J. Clarke updated the committee on the status of the Proposed Wild Horse Reservoir in Park County. Recent geotechnical exploration has resulted in a smaller physical footprint for the reservoir than had been projected earlier, but raising the dams has retained the desired volume of 93,000 acre-feet. This smaller footprint should result in less evaporative loss. Geotech work will continue for the next two years, which dam design is moving forward. 30% design is expected

later this year. Permitting with the Bureau of Land Management may begin this summer as well.

5. Source Water Protection Plan

M. Ashley & C. Stovall presented on Aurora Waters' Source Water Protection Plan, which identifies risks and mitigations for the multiple watershed that could impact the city's water system. They identified partnerships with other entities that help manage the scale, scope and expense.

6. Proposed committee restructure update

G. Baker, Public Relations Manager for Aurora Water, updated the committee on the proposed change to the Citizen's Water Advisory Committee's structure. Dick Eason identified two typos that were artifacts in the ordinance language from the redline process. The next step for the ordinance is to bring this to the Water Policy Committee, most likely at its April meeting. D. Dechant asked what drove the need for the committee to provide input into the areas identified in the ordnances. G. Baker stated that there are proposals for either water uses or water supply that could benefit from an avenue for reconsideration.

7.	New/Old Business	

None

8. Review Follow-Up Questions

G, Baker will provide a link to images comparing forest density over time.

9. Confirm Next Meeting – Tuesday March 14, 2023.

Th next meeting on April 14, 2023 was confirmed.

10. Adjourn			
The meeting was adjourned at 7:52 p.m.			
Angie Binder, Chair			
Citizens' Water Advisory Committee			
Citizens water Advisory Committee			

Adopted:

MEMORANDUM City of Aurora



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To: Citizens' Water Advisory Committee

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

Alexandra Davis, Deputy Director, Water Resources, Aurora Water

From: Richard Vidmar, Water Resources Manager

Date: April 11, 2023

Subject: Source Water Protection Plan – Presentation

Purpose:

This presentation to the Citizens' Water Advisory Committee provides an update on the status of water storage projects in the South Platte and Arkansas River Basins.

Summary:

One of the key features of Aurora's water system is a series of twelve reservoirs in three basins, which are used to manage water supplies. These reservoirs can hold over 156,000 acre-feet of water when full. The water in these reservoirs is the raw water supply for the City. As growth continues, water demands increase and future supplies become more variable, the need for additional storage becomes paramount in the development for the City's water system. 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. Staff will present an update on these projects.

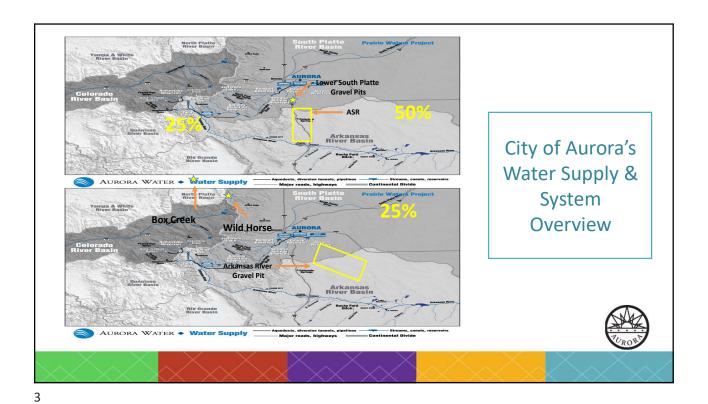
Question:

Informational item only. No action required.

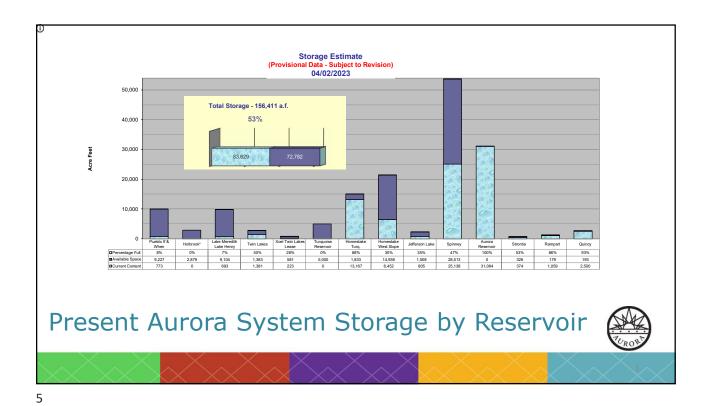
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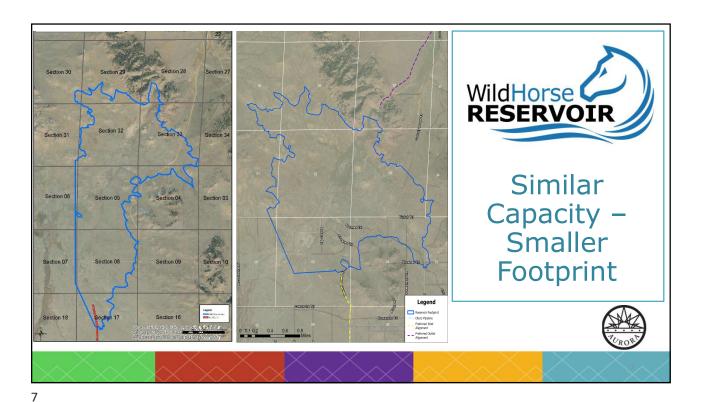
System Overview & Current Conditions Wild Horse Reservoir Box Creek Reservoir Recovery of Yield (ROY) Storage project Agenda North Campus Storage Aquifer Storage and Recovery East Reservoir



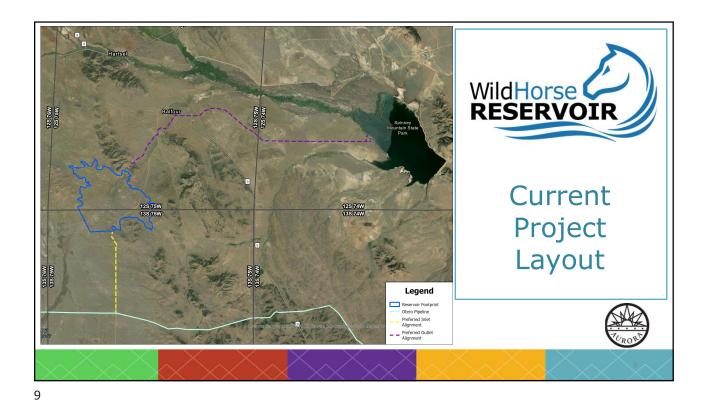
Storage Capacity vs. Total Storage 160,000 140,000 120,000 Acre-feet 60.000 40,000 Aurora System Storage 1987 - Present



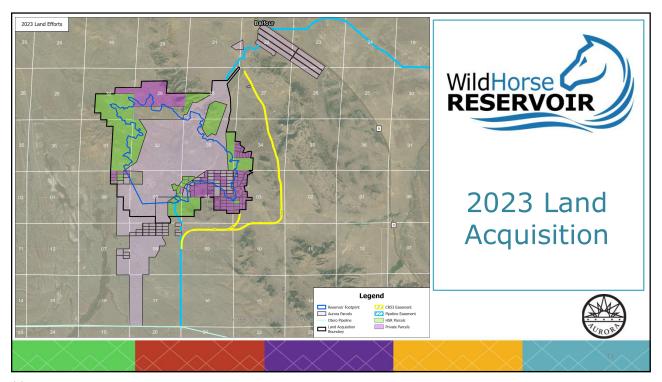
RESERVOIR Wild Horse Sunnicon Wild Horse Reservoir www.wildhorsereservoir.org

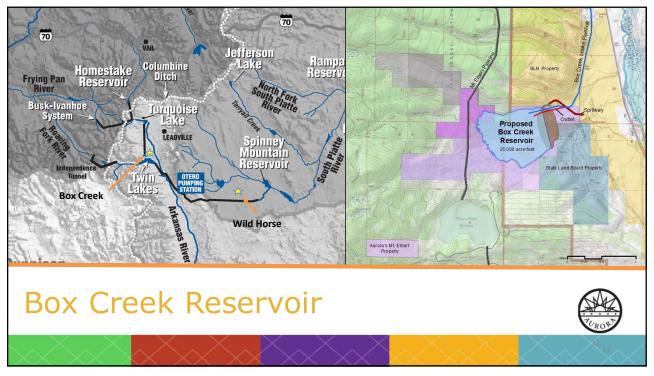


Reservoir Footprint Capacity (acre-foot) 96,500 92,000 WildHorse RESERVOIR Surface area (Acres) 2.394 1,650 Perimeter (miles) 15.8 12.64 Dam Specifications: Dam Crest Elevation (ft) 9062 9080 NWL & Spillway Elevation (ft) 9057 9070 Main Dam Material Zoned rockfill/ RCC Zoned rockfill Height (ft) 128 178 Length (ft) 975 846 Difference by East Saddle Dam 1 (old North) Material Zoned earthfill Zoned earthfill/ Rock Fill Height (ft) the Numbers Length (ft) 4,472 450 East Saddle Dam 2 (Old South) Material Zoned earthfill Zoned earthfill/ Rock Fill Height (ft) 61 72 Length (ft) 1250 5623 West Dam (old Northeast) Zoned Earthfill Zoned earthfill/ Rock Fill Material Height (ft) 22 155 Length (ft) 886 7150



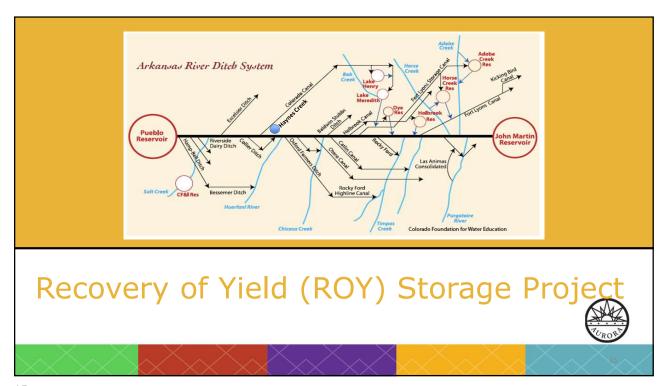


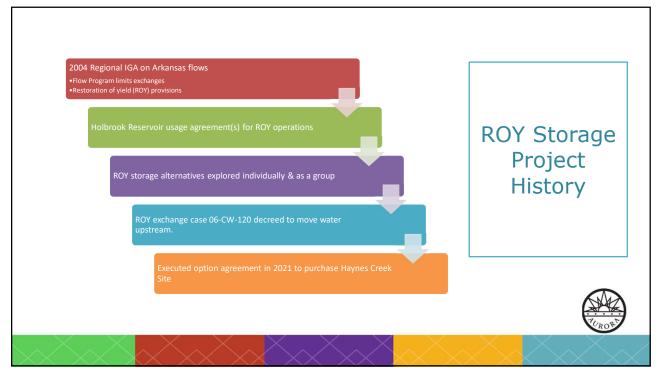


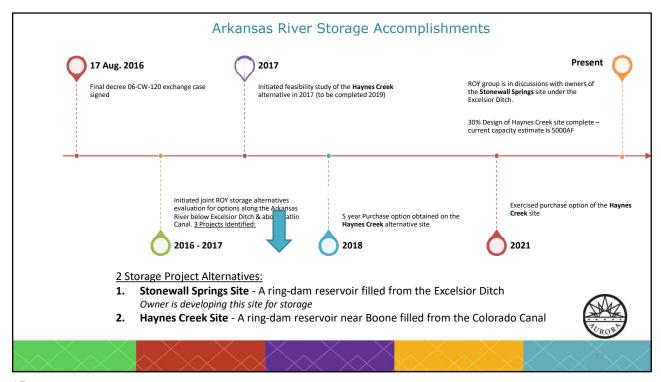


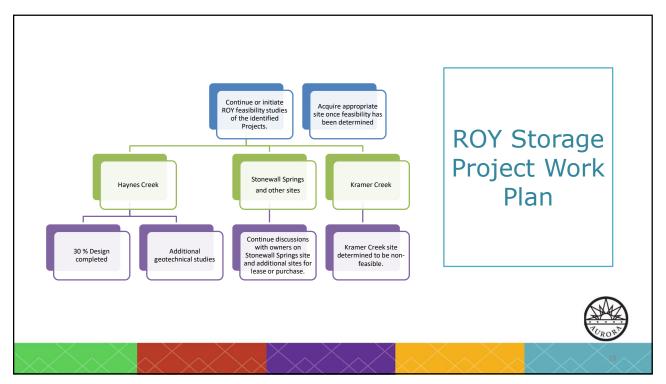


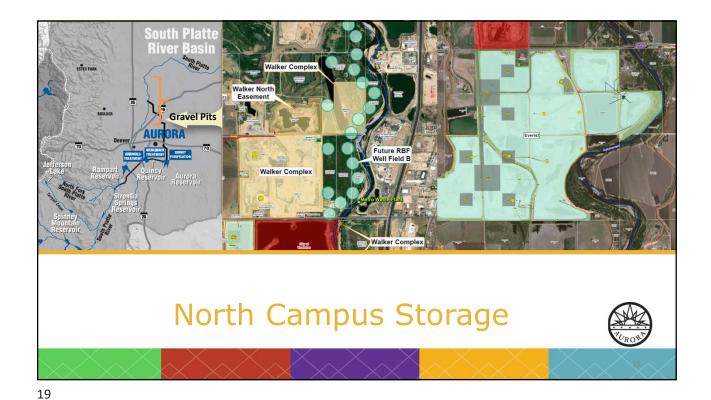


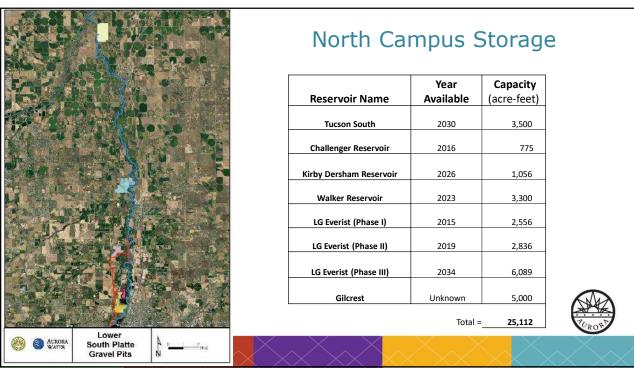


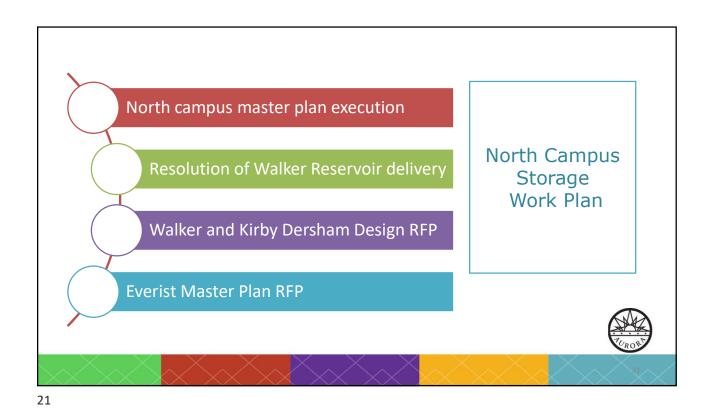


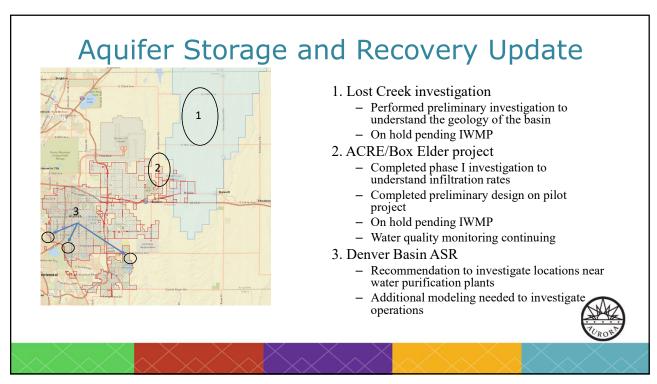








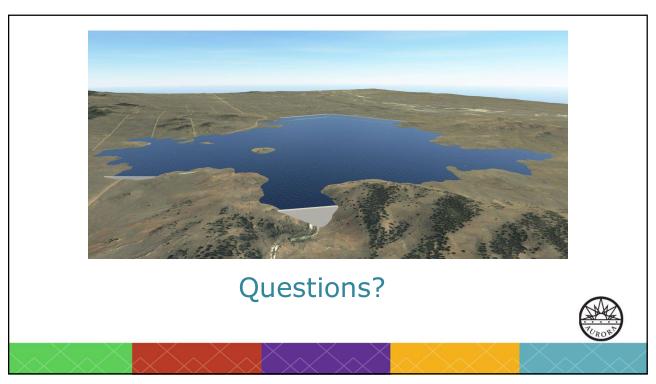




East Reservoir

- IWMP confirms the need for 10,000 to 25,000 AF
- Original sites filed in 2003
- Surface water offers the most operational flexibility
- 2023 Workplan
 - Investigate current land uses
 - Meet with current landowners
 - Perform natural resources assessments
 - Perform basic geologic mapping





MEMORANDUM City of Aurora



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To: Citizens' Water Advisory Committee

Through: Marshall Brown, General Manager, Aurora Water

From: Greg Baker, Manager of Public Relation, Aurora Water

Date: April 11, 2023

Subject: Drought messaging

Background

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. Staff will share the presentation materials being used to equip CWAC members for their discussions with the community.

Action Required

No action required. Informational item only.

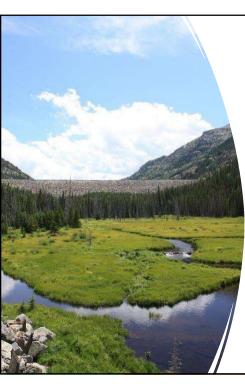
Attached:

Aurora's Rules for Outdoor Water Use Drought mailer

Aurora Water

MEETING AURORA'S FUTURE WATER NEEDS





Aurora Water By the numbers

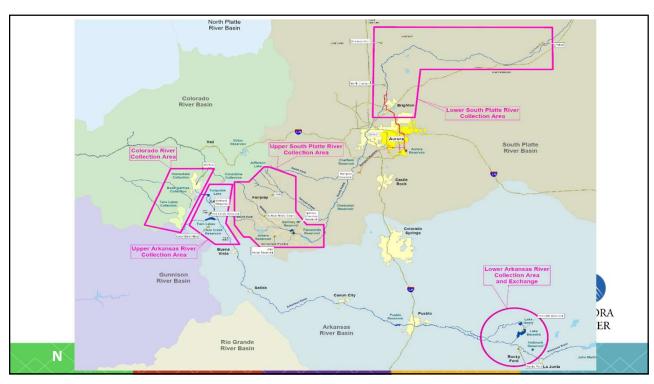
- Dependent on snowpack for 95% of primary water supply
- Reservoirs
 - 12 storage reservoirs
 - In multiple counties (Eagle, Pitkin, Lake, Pueblo, Otero, etc.)
- Cherry Creek Well fields
 - Alluvial, renewable (shallow & pulls for Cherry Creek)Deep Aquifer, non-renewable
- Infrastructure
 - 1,689 miles of potable pipelines
 - 1,198 miles of wastewater pipes
 - 132 miles of raw water pipes
- Multiple facilities across Aurora
 - 3 drinking water treatment facilities
 - 1 reclaimed water treatment facility

Meeting the Challenge

- Aggressive conservation efforts
 - Largest program in Colorado
 - Comprehensive landscape conversion rebates
 - Work with HOAs/Metro Districts to modernize technology and convert underutilized area
- Strong codes
 - Conservation embedded in Unified Development Code
 - Nonfunctional Turf Ordinance no turf in new development
- · Active acquisition program
- Strategic storage development

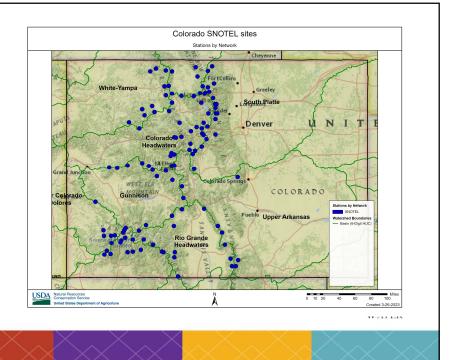


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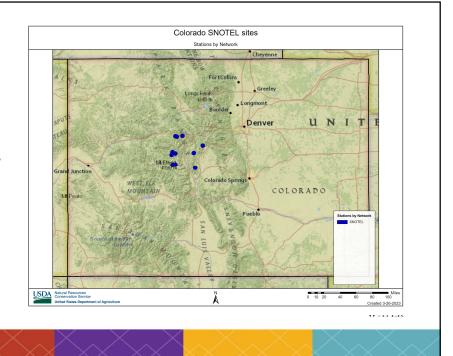


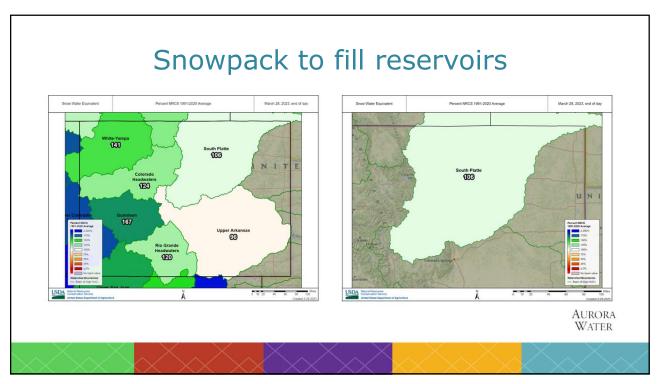


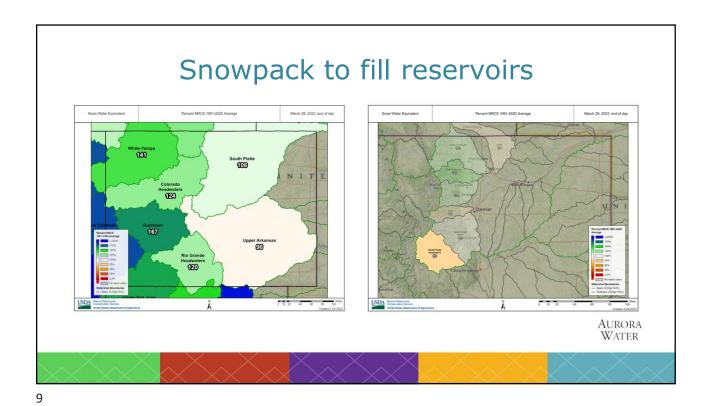
- Media reports on a statewide/basin wide averages
 - 114 snow measurement stations across Colorado
 - Aurora relies on is only 16 of the SNOTEL sites



- Media reports on a statewide/basin wide averages
 - 114 snow measurement stations across Colorado
 - Aurora relies on is only 16 of the SNOTEL sites







Aurora Snowpack Monday, March 27, 2023 SNOW WATER EQUIVALENT ACCUMULATION (SINCE OCT 1) % OF (INCHES) % of avg IPPER COLORADO RIVER BASIN COPPER MOUNTAIN
FREMONT PASS
INDEPENDENCE PASS
IVANHOE

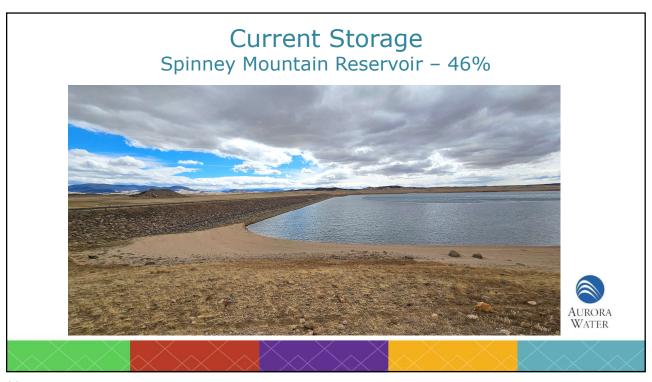
- BASIN AVERAGE SOUTH PLATTE RIVER BASIN BUCKSKIN JOE HOOSIER PASS MICHIGAN CREEK ROUGH AND TUMBLE BASIN AVERAGE ARKANSAS RIVER BASIN BRUMLEY FREMONT PASS 11,400 10,720 10,760 10,800 FREMONT PASS
 10,72u
 HAYDEN PASS
 10,72u
 PORPHYRY CREEK
 10,760
 SOUTH COLONY
 10,800
 BASIN AVERAGE

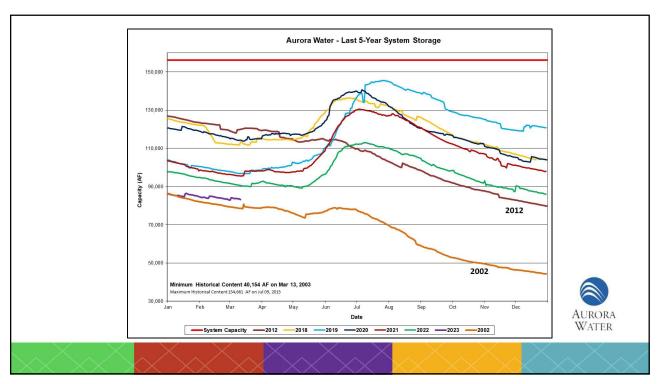
 Yellow cells have bad, estimated, or
 Yellow Terra AVERAGE OVERALL AURORA WEIGHTED AVERAGE

 94
 Percentage weighted by average annual yield contribution by basin (average of the past six years).
- Snow Report 94% of median systemwide
 - > S. Platte River (50%) 78% of median
 - > Arkansas River (25%) 99% of median
 - > Colorado River (25%) 115% of median



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Water Management Plan

- Current WMP Four stages
 - Normal 3 day per week, non-fixed
 - Stage I 2 day week, fixed days, surcharge, 20% reduction
 - Stage II 1 day week, fixed day, surcharge, 50% reduction
 - Stage III No outdoor water use, surcharge, 100% reduction
- Watering Variance Program for large properties



13



Stage I – 20% Reduction

- Watering maximum 2 days/week for existing landscape and new landscape after permit expiration
- Variance program properties exempts from day/week but with a 20% use reduction goal
- Turf grass may go dormant (not dead)
 - Aurora Code enforcement will not fine for dormancy
 - · HOA's cannot fine for dormancy per Colorado Revised Statutes



Surcharges

	Stage 1	Stage 2	Stage 3
Residential Surcharges			
Up to 110% WQA	\$0.00	\$0.00	\$4.20
Over 110% WQA	\$1.95	\$7.60	\$12.60
Commercial Surcharges			
Up to 110% WQA	\$0.00	\$0.00	\$4.20
Over 110% WQA	\$1.95	\$7.60	\$12.60
Multifamily Surcharges			
Up to 110% WQA	\$0.00	\$0.00	\$4.20
Over 110% WQA	\$1.95	\$7.60	\$12.60
Irrigation Surcharges			
All Usage	\$1.95	\$7.60	\$25.20



15

Questions?



AuroraGov.org/Drought





Estamos en fase I de sequia. Dos días de riego maximo a la semana.

Riego entre las 10 a. m. y las 6 p. m. desperdicia agua y está prohibido desde el 1 de mayo hasta el 30 de septiembre.

LAS REGLAS PARA EL USO DE AGUA AL AIRE LIBRE ESTÁN EN EFECTO

We're in a stage I drought. Two day a week maximum on watering.

Watering between 10 a.m. and 6 p.m. wastes water and is prohibited from May 1 through Sept. 30.

RULES FOR OUTDOOR WATER USE ARE IN EFFECT

Presorted Std U.S. Postage PAID Denver, CO Permit No. 2464





POP-UPS **WATERING MONTHS** PER ZONE/ 3 TIMES PER DAY **MAY** 7 14 22 2 days per week JUNE 19 6 12 2 days per week **JULY** 7 20 12 2 days per week AUGUST 19 6 12 2 days per week SEPTEMBER 5 **16** 10 2 days per week

LAWN WATERING RECOMMENDATIONS

These runtimes are meant to be used as part of the cycleand-soak method, which helps water seep into the soil where you want it and encourages healthy root systems. Here's an example of how to set your controller for May:

Adjust the number of days per week. Two-days per week maximum.

Set each zone based on the month and sprinkler type.

May example: Seven minutes for pop-ups.

Schedule the start times an hour apart.

May example: Start times at 4 a.m., 5 a.m. and 6 a.m.

To receive weekly schedules adjusted to recent weather, sign up for Know Your Flow at AuroraGov.org/KnowYourFlow.

Stage I • Severely Dry • Watering Schedule						
SUN.	MON.	TUE.	WED.	THURS.	FRI.	SAT.
EVEN Address residential customers	Additional city needs	OTHER Multi-family, HOA, Non-residential	ODD Address residential customers	EVEN Address residential customers	OTHER Multi-family, HOA, Non-residential	ODD Address residential customers



Aurora's reservoirs are half full.

City Council recently declared a stage I drought. We have a goal of saving 20% on outdoor water use. We have many options to help you through our conservation programs. For more information, go to AuroraGov.org/Conservation.

Embalses de Aurora están medio llenos.

El Consejo legislativo de la Ciudad declaró Fase I de sequía. En esta Fase tenemos un gol de ahorrar 20% del agua de uso exterior. Tenemos muchas opciones para ayudarle a través de nuestros programas de conservación. Para obtener más información, visite AuroraGov.org/Conservation.



AuroraGov.org/Drought



Watering rules enforced May 1–Sept. 30 Water 2-days-per-week maximum on assigned days

To report water wasting, use the form at AuroraGov.org/ContactUs or download the Access Aurora app on your mobile device.

- Drought surcharges are in effect for usage greater than 110% of the winter quarter average. You can find your winter quarter average on your water bill under "sewer usage chg." You'll be charged \$1.95 per thousand gallons.
- No lawn watering between 10 a.m. and 6 p.m.
 - · Watering vegetable or flower gardens by hand is allowed during these times.
- Excessive runoff, spraying onto streets or sidewalks, or other waste is not permitted.
- New sod, seed and irrigation systems require a permit for front, side and backyards. Call 303.739.7195 or visit AuroraGov.org/Conservation for an application and additional information.

Water Conservation • 303.739.7195 • conservation@auroragov.org

Reglas de riego vigentes del 1 de Mayo al 1 de Septiembre 30. Dos días de riego maximo a la semana en los días asignados.

Para informar sobre desperdicio de agua, use el formulario en AuroraGov.org/ContactUs o descargue la aplicación Access Aurora en su dispositivo móvil.

- Los recargos por sequía están vigentes para el uso superior al 110% del promedio del trimestre de invierno. Usted puede encontrar su promedio del trimestre de invierno en su factura de agua bajo el nombre "sewer usage chg." Se le cobrará \$1.95 por mil galones.
- Está Prohibido el riego del césped entre las 10 a.m. y las 6 p.m.
 - El riego a mano de hortalizas o jardines de flores está permitido durante este tiempo.
- No se permite el desagüe o riego excesivo, hacia las calles y aceras incluyendo cualquier tipo de desecho.
- Los nuevos sistemas de césped y semillas para el jardín frontal, trasero, y lateral requieren un permiso tanto como los nuevos sistemas de riego. Llame al 303.739.7195 o visite AuroraGov.org/Conservation para obtener una solicitud e información adicional.

Conservación del Agua • 303.739.7195 • conservation@auroragov.org



DISPERSORES CABEZAS **CABEZAS** ROTATORIAS **DE ALTA MESES DE** RIEGO MINUTOS POR ZONA/ 3 VECES POR DÍA **MAYO** 7 14 22 2 días por semana JUNIO 6 12 19 2 días por semana **JULIO** 7 12 20 2 días por semana **AGOSTO** 6 12 19 2 días por semana SEPTIEMBRE 5 10 16 2 días por semana

RECOMENDACIONES DE RIEGO DEL CÉSPED

Estos tiempos de ejecución están destinados a ser utilizados como parte del método de ciclo y remojo, que ayuda a que el agua se filtre en el suelo. donde lo desees y fomenta sistemas radiculares saludables. Este es un ejemplo de cómo configurar el mando para mayo:

Ajuste el número de días por semana.
Dos días de riego maximo a la semana.

Establezca cada zona según el mes y el tipo de rociador. Ejemplo de mayo: Siete minutos para ventanas emergentes.

Programe las horas de inicio con una hora de diferencia. Ejemplo de mayo: Horas de inicio a las 4 a.m., 5 a.m. y 6 a.m.

Para recibir horarios semanales actualizados al clima reciente, regístrese en el programa "Know Your Flow" en AuroraGov.org/KnowYourFlow.

Fase I • Severamente Seco • Horario de Riego						
DOMINGO	LUNES	MARTES	MIÉRCOLES	JUEVES	VIERNES	SÁBADO
Dirección Par Clientes Residenciales	Para Uso de Ia Ciudad	Otras Clases Multifamiliar, HOA, no-residencial	Dirección Impar Clientes Residenciales	Dirección Par Clientes Residenciales	Otras Clases Multifamiliar HOA, no-residencial	Dirección Impar Clientes Residenciales