Water Conservation at The Conservatory

Diana Denwood Water Conservation Supervisor, Aurora Water





Aurora **Raw Water Supply** Colorado **Prairie Waters** River Basin Brighton Collection Area Aurora Dillon South Platte Upper South Platte River Colorado River River Basin **Collection Area** Collection Area Chatfield Homestake Castle Fairplay Leadville Spinney Mi Reservoir Twin Lakes Colorado Clear Creek Elevenmile Upper Buena Arkansas River Collection Area Lower Arkansas River Gunnison Collection Area River Basin Canon City Pueblo Pueblo **Arkansas** River Basin **Rio Grande** River Basin Rocky John Martin Reservoir

Where does Aurora's water come from?

- 25% Colorado River
 Basin
- 25% Arkansas River
 Basin
- 50% S. Platte River Basin
- 12 reservoirs across the state
- Water can travel up to 180 miles

Why Conserve?

Your bottom line

Lower your bills (water is typically one of the highest bills paid by an HOA, maintenance costs are also reduced)

Aurora's bottom line

- Sustain our water resources as population increases
- Reduce impacts from drought
- Delay increases in water rates

Colorado's bottom line

Sustain our water resources and industries





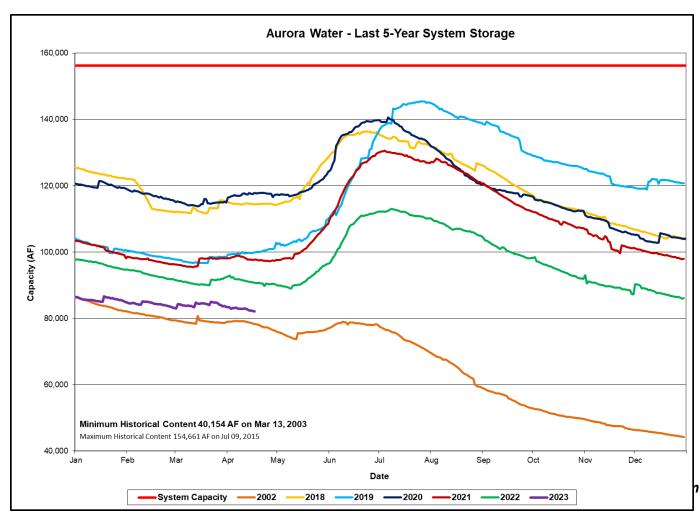
Aurora Declares Drought starting May 1 How can we be in drought?

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





Stage I Drought



- Watering maximum 2 days/week
- Variance program properties have 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 code

Learn more at AuroraGov.org/Drought



h Customer Satisfaction with Midsize Water Utilities in the West For J.D. Power 2021 award information, visit jdpower.com/awards

Grass Dormancy

- Dormancy is hibernation, not death
- Temporary: no more than 4 weeks
- Reduces water consumption by approximately 85% while dormant
- No foot traffic, mowing or fertilizing during dormancy
- Follow industry best practices for reviving turf after dormancy
- Sisit our grass dormancy page AuroraGov.org/Dormancy Water



Preparing Grass for Less Water

- 1. Don't overwater
- 2. Set mowers to highest setting
- 3. Mow less frequently
- 4. Avoid aeration and fertilization



Image source: Gilbethwild.com



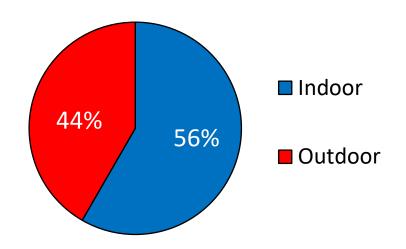


Indoor Water Use & Best Practices



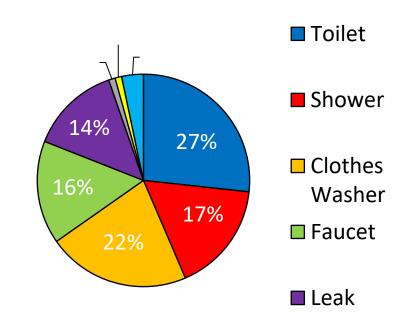


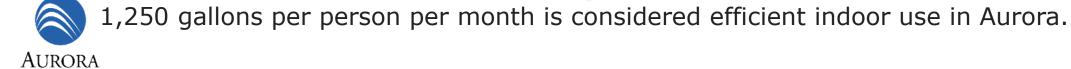
Indoor vs Outdoor Use



WATER

Indoor Use Only







Indoor Conservation Standards



What is "efficient"?

- Showerheads 2.0 GPM or less
- Bathroom aerators at 1.0 GPM or less
- Kitchen/utility aerators at
 2.0 GPM or less
- Toilets 1.28 GPF or less





Indoor Conservation Best Practice: Check for Leaks





Toilet tank parts ~ 5 year life
Pressure assist tanks ~ 10 year life

Leaks are often silent, check your toilets at least once a year

Leaks never get better, they only get worse!





Efficiency Best Practice: Upgrade Toilets

#1 in Custo

1.28 GPF is theColorado standard



0.8 is the Aurora rebate standard







Get the Word Out

- Newsletter
- Postcards
- Flyers on doors







Outdoor Water Use





Irrigation Efficiency Best Practices:

The best irrigation systems have all of these elements:

- 1. Understand the property
- 2. Proper scheduling
- 3. Efficient parts
- 4. Communication





Irrigation Efficiency Best Practices: Understand the Property

- 1. Irrigation assessment
- 2. Sprinkler schedule
- 3. Mapping

Shut-off valves

Backflows

Meters

Controllers

Rain sensors

Zone map

Looped system?

Maintenance

boundaries





Irrigation Efficiency Best Practices: Proper Scheduling



Cycle and Soak

60 minutes in between cycles

Permanent restrictions

- Off between 10 and 6
- Max 3 days/week





Irrigation Efficiency Best Practices: Efficient Parts

Efficient parts:

- pressure regulation
- "smart" systems
- rotary nozzles

Rebates available

- Smart controllers
- Nozzles
- Bodies
- Rain sensors







Irrigation Efficiency Best Practice: Communication

Appoint board member to do primary communications

Break Action Plan:

- Who do you call first?
- Immediately access the backflow prevention device to shut it off
- Make repair
- Test the system





Large Property Variance Program

- Allows HOA to water 7 days per week (each zone max. 3 days)
- Usage is monitored, usage emails are sent monthly to contact

Requirements:

- Multifamily, HOA or Commercial
- Min. 20,000 sq ft



is participating in the LARGE PROPERTY WATER VARIANCE PROGRAM

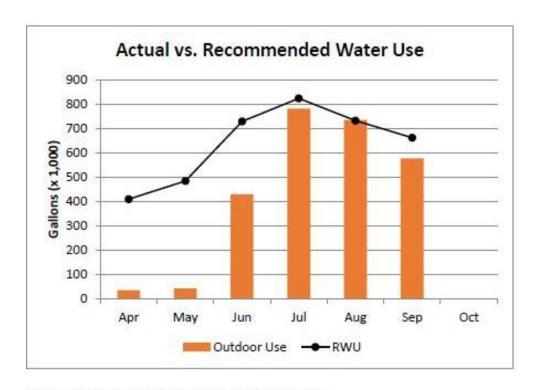


2023





Variance Program Communications



Month	Actual Use (gal x 1,000)	RWU (gal x 1,000)	% of RWU
Apr	35	409.5	9%
May	43	483.7	9%
Jun	430	728.4	59%
Jul	781	823.3	95%
Aug	734	732.0	100%
Sep	577	662.0	87%
Oct			
Total	2600	3838.8	68%



Square feet of turf grass: 149,459

Square feet of water-wise landscape: 53,930

Billing Period: 8/6/2018 to 9/5/2018 # of Days: 30



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Water-wise Landscapes



What is Water-wise? Not this.







#1 in Customer Satisfaction with Mids For J.D. Power 2021 award info

This is Water-wise!



Water-wise Landscapes

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Grass Replacement Incentive Program

- Remove healthy grass and install a water-wise landscape
 - HOA's: Max. \$50,000
 - Residents: Max. \$4,000 (\$1,000 of which can be used for labor or tool rental)
 - Front yards only
- Two-year payment schedules





GRIP Rebate General Process

- 1. Start application (online)
- 2. Submit a design and itemized project estimate
- 3. Obtain approval and pre-approved rebate amount
- 4. Begin work
- 5. Schedule and pass inspections
- 6. Complete work
- 7. Submit receipts

Pay close attention to application and installation deadlines.





Free Classes



Topics:

- Water-wise gardening
- Sprinklers and drip
- Composting
- Discover water-wise plants tour
- Pollinators and bee condos

...and more

Sign up at auroragov.org/waterclasses

Thank you!

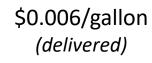




Water cost comparisons





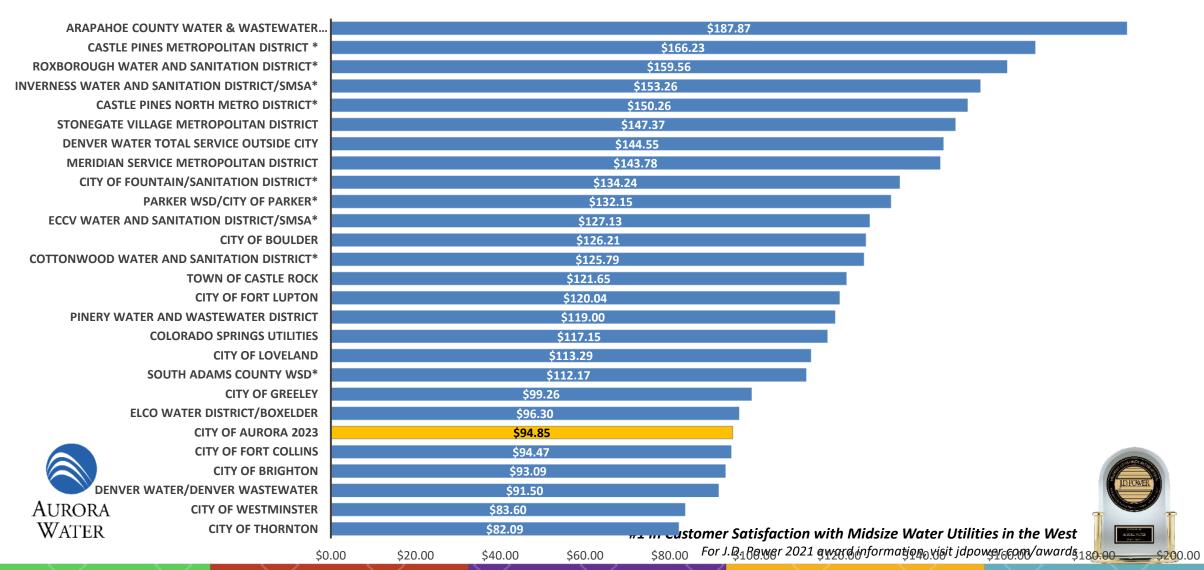






Monthly Average Water, Sewer & Storm Bill Comparison 2023

88,000 gallons a year, 4 people house, 7,700 sq. ft. lot size, 4,230 Irrigable Area





Parks, Recreation and Open Space