



Water Conservation Update

Resource Management Commission
May 18, 2021

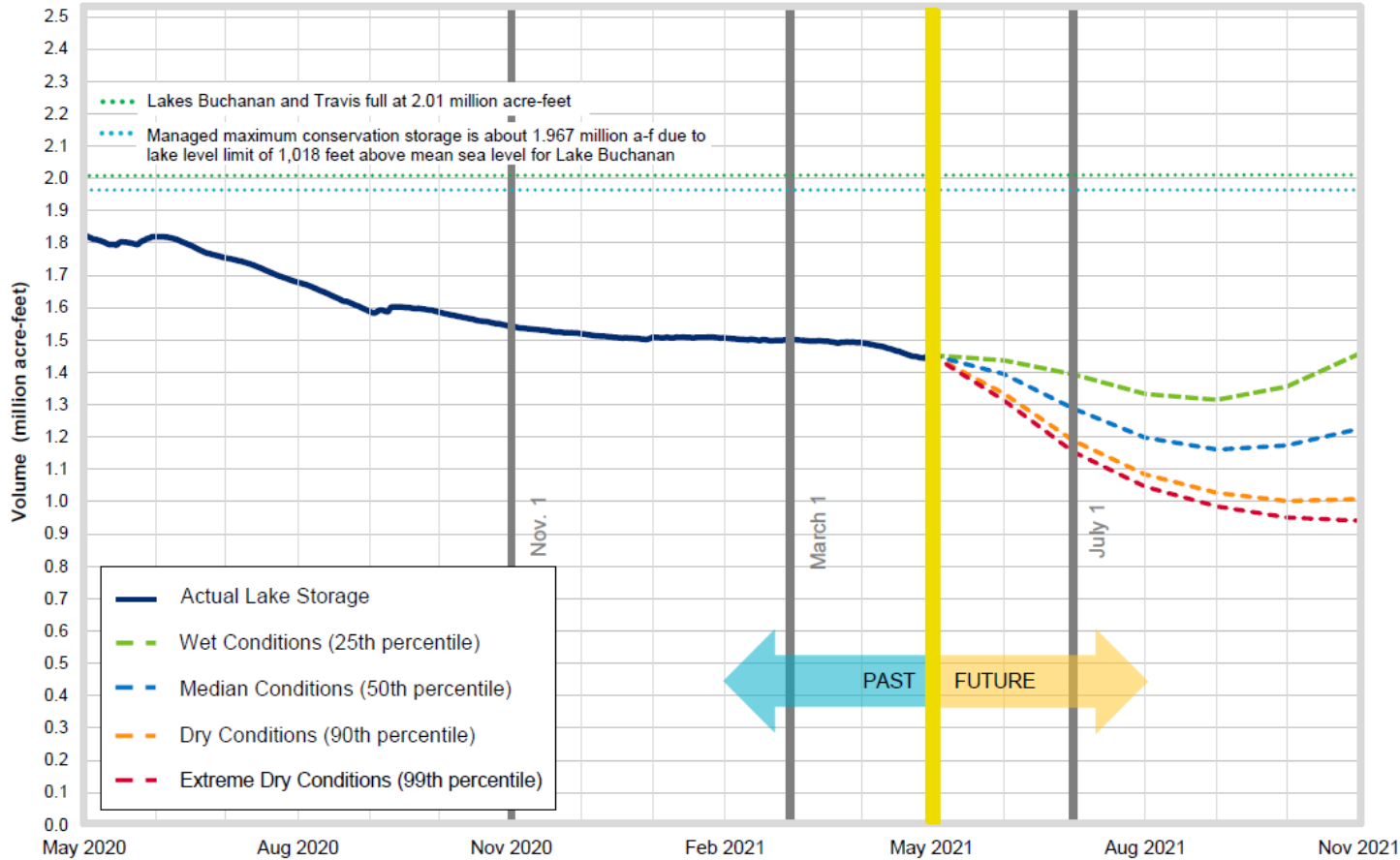
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Lake Forecast



Lakes Buchanan and Travis Total Combined Storage Projections



Date: May 1, 2021

Note: One acre-foot equals 325,851 gallons

City of Austin Drought Contingency Plan Drought Response Stage Triggers:

Conservation Stage:
Above 1.4 MAF

Stage I:
1.4 MAF

Stage II:
900,000 AF

Stage III:
600,000 AF

Emergency Response Stage IV:
Catastrophic event including prolonged drought

Highland Lakes Storage summary as of May 6, 2021

Combined lake storage: 1.50 million acre feet

Combined reservoir total: 75%

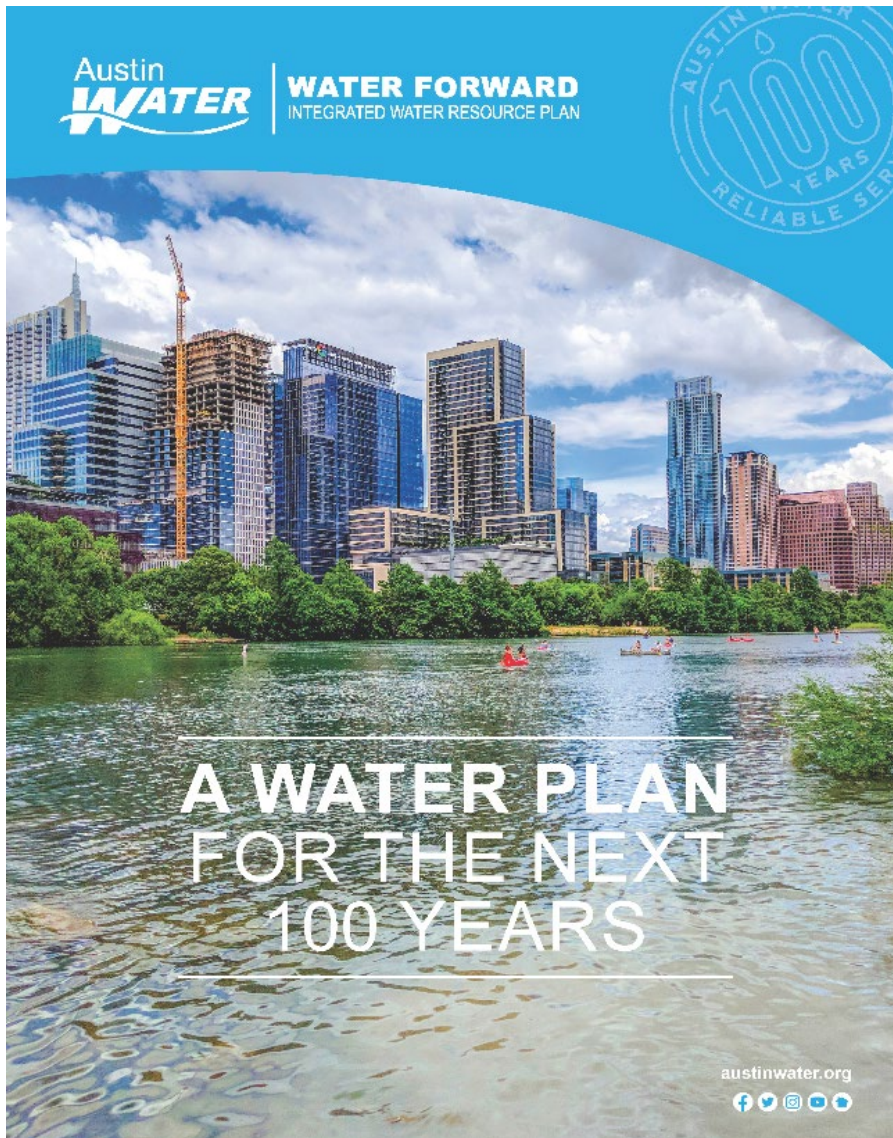


	Trigger	Action	Goal	End Condition
Demand Triggers	260 mgd ^a for 3 consecutive days	City Manager may order Stage 2 ^b Water Restrictions	Reduce water use by 15% of 260 mgd	City Manager ends based on daily supply and demand of water
	270 mgd for one day	City Manager may order Stage 2 Water Restrictions	Reduce current water use by 15% of 270 mgd	City Manager ends based on daily supply and demand of water
Supply Triggers	Combined lake storage falls below 1.4 million acre-feet	City Manager may order Stage 1 Water Restrictions	Reduce current water use by 5%	Considered when combined storage reaches 1.4 MAF and expected to remain above 1.4 MAF for four months
	Combined Lake storage falls below 900,000 acre-feet	City Manager may order Stage 2 Water Restrictions	Reduce current water use by 10 to 20%	Considered when combined storage reaches 1.1 MAF and projected to stay above 900,000 AF for four months
	Combined Lake storage falls below 600,000 acre-feet or a drought worse than the drought of record is declared	City Manager may order Stage 3 Water Restrictions or Additional Restrictions as necessary to meet pro rata curtailment requirements	Reduce water use by a minimum of 20% from a baseline approved by LCRA, which may account for City's conservation measures	City Manager determines that condition is no longer required to meet mandatory curtailment targets; combined storage expected to remain above 600,000 AF for four months
Emergency Triggers	As determined by City Manager, system outage, equipment failure, contamination of water source or other emergencies	City Manager may order Stage 4 Water Restrictions or Additional Restrictions	Reduce water use to levels deemed necessary	City Manager ends based on daily water demand or the end of supply constraints

Conservation Stage	Stage 1	Stage 2	Stage 3	Stage 4	Emergency
<ul style="list-style-type: none"> • 1X week watering schedule for automatic systems and 2X week for hose-end sprinklers during prescribed morning and evening hours • Water upon request in restaurants • Patio misters only between 4:00 pm and midnight. • Positive cutoff valves for hand watering lawns and washing cars at home • Hotel linen exchange program required 	<ul style="list-style-type: none"> • Conservation Stage restrictions • Reduced hours for automatic irrigation systems 	<ul style="list-style-type: none"> • Conservation and Stage 1 restrictions • Charity car washes prohibited 	<ul style="list-style-type: none"> • Conservation, Stage 1, and 2 restrictions • Watering golf course greens/fairways limited • Water used for ornamental fountains with waterfalls limited 	<ul style="list-style-type: none"> • Conservation, Stage 1, 2 and 3 restrictions • Filling of spas prohibited 	<ul style="list-style-type: none"> • Conservation, Stage 1,2,3 and 4 restrictions • Potable water use prohibited for: outdoor irrigation, car washing, pools, splash pads, spas; ornamental ponds; foundations; • Any additional measures necessary to protect the public health, safety, welfare, infrastructure or available resources

Potential New Stage 1 and 2 Restrictions

- Prohibiting the use of potable water in ornamental ponds, water features, and medians except for the use of subsurface irrigation and tree bubblers;
- Limiting the hours and days for the irrigation of golf course fairways to the commercial irrigation schedule and limiting the watering of greens or the tees to three days a week unless a variance has been granted;
- Limiting residential car washing to once a week on a Saturday or Sunday as assigned as the watering day for that address;
- Requiring a nozzle with flow rate of not more than 3.5 gpm, a hose with a positive shutoff valve, or a bucket for outdoor surface pressure washing;
- A pool cover must be used for residential pools when the pool is not in use; and
- Limiting the hours and days for the irrigation of athletic fields to once a week on the commercial schedule except as provided by a variance



Water Forward Update



Water Forward 2018 Progress

- Completed ahead of schedule all recommended new and revised water conservation incentives:
 - Landscape Transformation
 - Irrigation Efficiency
 - Alternative Water
- Many new/revised incentive programs exceeded WF recommendations (21 total programs covering all water use sectors)
- Completed on or ahead of schedule all CII ordinances relating to:
 - AC Condensate Reuse
 - Cooling Towers
- Completion of some Alternative Water Ordinances delayed by Land Development Code (LDC) litigation

CII Incentives

- ◆ Increased rebate amounts for all programs based on updated cost benchmarks
- ◆ Added new \$1 million Alternative Onsite Water Reuse System Incentive Program
- ◆ Added new rebate for high efficiency cartridge pool filters
- ◆ Expanded Bucks for Business to include alternative onsite water systems for new facilities and reclaimed water connection and “purple pipe” systems where not required
- ◆ Extended Irrigation System Improvement Rebate to new facilities, added pressure regulation components, and streamlined application processing

Residential and Multi-family Incentives

- ◆ Increased rebate amounts for all programs based on updated cost benchmarks
- ◆ Added new Laundry to Landscape greywater reuse program
- ◆ Added new Home Water Use Monitoring Device rebate program
- ◆ Added new water efficient Pool Cartridge Filter Rebate
- ◆ Expanded WaterWise Landscape Rebate to include patios
- ◆ Began implementation of MyATX Water using electronically read “smart” meters connected to a wireless network and customer portal providing near real time, daily water use data, leak alerts, conservation tips, rebate information, and other service and billing notifications

CI Ordinance

• AC Condensate Reuse

- AC condensate capture and use required in 2017 for new facilities with a cooling capacity of 200 tons or greater
- Conforming amendments proposed in LDC and as local amendments to the 2021 Uniform Mechanical Code (council action scheduled for June 2021)

• Cooling Towers

- Added biocide to required water efficiency requirements
- Added efficiency standards for drift eliminators
- Added administrative penalties for violations of cooling tower efficiency standards, equipment, registration, and inspection requirements
 - Penalties also in effect for commercial irrigation systems and car washes
- Non-compliant cooling towers ineligible for evaporative loss wastewater billing credit

Assistance to Income Limited Customers

- ◆ **G.O. REPAIR!** – AW partners with Housing & Planning Department (HPD) to provide grants of up to \$20,000 per year to qualifying homeowners for plumbing repairs, accessibility improvements, and to make other repairs to address substandard housing conditions that pose health and safety risks.
- ◆ **Free Water Conservation Tools** – AW Conservation provides free water saving materials including high efficiency aerators and showerheads; micro-fiber towels; soil moisture meters; plumbing handbooks to residential and multi-family customers.
- ◆ **Emergency Home Repair Program** – AW is partnering with HPD to provide \$1 million to assist income limited customers with plumbing repairs needed in response to Winter Storm Uri

Water Forward 2023

• Potential Residential Landscape Transformation and Irrigation System Limitation Ordinances

- Limit turf grass and automatic irrigation systems to 2.5 X building footprint or not more than 10,000 sq. ft., whichever is less;
- Landscape may only include
- native drought tolerant plants on city's Preferred Plant List
- Would apply to new, infill and tear down/rebuild residential developments
- Originally proposed under 140 Plan; starting point for looking at potential options and 2023 proposals



Water Forward 2023 Timeline

Planning Milestone	Completion
Public kickoff of plan update process	Aug/Sept 2021
Revised water demand forecasts	Jan/Feb 2022
Update of 2018 WF Strategies	Mar/Apr 2022
Climate/hydrology analysis	May/June 2022
Identification of water resource needs	Jul/Aug 2022
Identify, screen, and characterize additional strategies as needed to meet water supply needs	Sept/Dec 2022
Develop plan recommendations and draft report	May/Aug 2023
Boards and commissions review and council approval	Sept/Dec 2023



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