

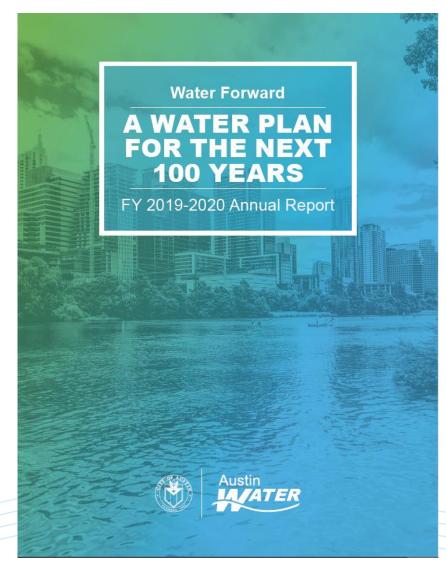
## Water Forward 2018 Implementation Progress





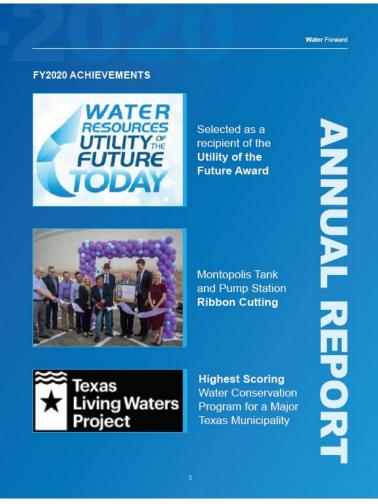
# Water Forward FY20 Annual Report

- Report presented to Task Force January 12, 2021
  - Graphically designed report included in Task Force packets and posted to Water Forward webpage
- This report documents Austin Water's progress made during Fiscal Year 2019-2020 (FY20) to implement the Water Forward plan.
- Despite challenges posed by the COVID-19 pandemic, staff made considerable progress on near term Water Forward strategies.



# FY20 Implementation Activities

- Participation in Region K water planning process
- Advanced Metering Infrastructure project begun
- Onsite Water Reuse System (OWRS) regulatory framework approved by Council
- Development of water benchmarking calculator, OWRS incentive program, and blackwater reuse pilot at Planning and development Center
- Aquifer Storage and Recovery Pilot and Program Management project approved by Council





## FY20 Metrics

- Future projections and targets are as reported in the adopted 2018 Water Forward plan.
- Savings and yield targets will be updated in the Water Forward 2024 plan to reflect strategy implementation progress and improvements to strategy savings and yield estimates.

#### Population, Pumpage and Gallons Per Capita Per Day (GPCD)

			<i>I</i>	
	FY19 Actual	FY20 Actual	2020 Projection Water Forward 2018 Plan	2040 Projection Water Forward 2018 Plan
Served Population (Retail and Wholesale)	1,078,171	1,099,990	1,101,600	1,577,800
Potable Pumpage <sup>2</sup> (Acre Feet per Year)	145,000	157,000	144,000	160,000
Potable GPCD <sup>3</sup>	120	127	117	91
Potable and Non-Potable Water Provided <sup>4</sup> (Acre Feet per Year)	149,700	161,800	145,000	182,000
Potable and Non-Potable GPCD <sup>5</sup>	124	131	117	103

#### Water Forward Strategy Savings and Yield

	Strategy	FY19 Actual	FY20 Actual	2020 Target	2025	2040
		Savings or	Savings or	(acre-	Target	Target
		Yield	Yield	feet/year)	(acre-	(acre-
		(acre-feet)	(acre-feet)		feet/year)	feet/year)
	Advanced Metering Infrastructure (AMI)	-	-	600	600	3,880
	Utility-Side Water Loss Control (savings) <sup>6</sup>	-	-	3,110	4,090	9,330
	Commercial, Industrial, and Institutional (CII) Ordinances	-	-	1,060	1,060	1,060
	Water Use Benchmarking and Budgeting	-	-	-	-	5,950
	Landscape Transformation Ordinance	-	-	-	-	3,040
	Landscape Transformation Incentive	-	TBD	-	80	320
	Irrigation Efficiency Incentive	-	TBD	40	80	210
	Alternative Water Ordinance	-	-	-	210	1,620
	Alternative Water Incentive	-	TBD	-	500	3,860
Ī	Sewer Mining	-	-	-	10	1,000
	Distributed Wastewater Reuse <sup>7</sup>	443	448	410	420	3,560
	Centralized Reclaimed Water System <sup>8</sup>	4,140	4,368	3,980	4,590	15,480
	Aquifer Storage and Recovery	-	-	-	-	60,000
	Brackish Groundwater Desalination	-	-	-	-	-
_[	Indirect Potable Reuse (IPR) through Lady Bird Lake	-	-	-	-	11,000
=[	Capture Local Inflows to Lady Bird Lake	-	-	-	-	3,000
	Off Channel Reservoir	-	-	-	-	-

## Water Forward FY21 Q4 Report

water Forward F121 Q4 Report						
	FY21 Q4 Progress	Current/Planned FY22 Q1 Activities	Future Implementation Steps			
Water Forward 2024	Finalized climate and hydrology consultant procurement. Continued pre-planning, and technical work to support WF plan update, including demographics and demand-related data gathering and updates.	Continue pre-planning and technical work to support WF plan update.	FY22: Begin community engagement, update methodology, demands, climate & hydrology analysis.  FY23: Identify water needs, strategies, develop portfolios.			
Conservation  My ATX Water 2040 Yield Target: 3,880 AF/Yr	My ATX Water team performed pre-install field surveys and continued meter installations, bringing the total number of meters installed to ~14,000. The My ATX Water customer portal was at ~53% adoption rate for customers after new meter is installed.	Surveys and installs will continue around the city, moving from neighborhood to neighborhood as more installers are hired.	FY22: Installation of 250,000 meters continues. FY25: Anticipated project completion.			
Landscape Transformation Ordinance 2040 Yield Target: 3,040 AF/Yr	AW staff continued internal planning discussions and technical analyses to support future landscape transformation ordinance.	AW staff to develop project plan and prepare for stakeholder engagement.	FY22-23: Presentation of a project plan and stakeholder engagement to begin in FY22 Q2. Planned completion and adoption of landscape transformation ordinance in FY23.			
Drought Supplies  Aquifer Storage and Recovery 2040 Yield Target: 60,000 AF/Yr	Completed ASR storage zone screening and began work on detailed analysis. Continued work on integration point analysis, the ASR engagement and education plan, educational materials, and equity work.	Complete detailed storage zone analysis and integration point characterization. Prepare for educational campaign launch in Spring '22 and began work to develop scenarios for project alternatives.	FY22-23: Initial contract and identify where to pilot.  FY24-27: Design, construct, and test ASR pilot. Develop recommendations for full-scale ASR.			

FY28-35: Preliminary engineering, design, construction of full-scale ASR.

## Water Forward FY21 Q4 Report

### FY21 Q4 Progress

#### Current/Planned FY22 Q1 Activities

#### **Future Implementation Steps**

### **Onsite Water Reuse**

Alt. Water Ordinance & Incentive 2040 Yield Target: 5.480 AF/Yr AW staff performed stakeholder outreach to educate the development community on the OWRS Ordinance and Pilot Incentive program. Staff also reviewed the first application for an OWRS project, which included an application for the pilot incentive program.

Staff continuing to review OWRS applications and incorporating this review process in the City's development review system, commissioning OSCAR and CLARA pilot, and finalizing the online water benchmarking platform.

FY23: Onsite water reuse requirement for new developments >250,000 square feet effective Dec. 1, 2023.

#### **Reclaimed Water**

Centralized Reclaimed 2040 Yield Target: 15,480 AF/Yr

Decentralized Reclaimed 2040 Yield Target: 3,560 AF/Yr AW continued work to 1) implement AW's 2013 Completing the Core plan to create a reclaimed loop through downtown and east Austin and 2) update the Centralized Reclaimed Master Plan. AW launched a pilot program to incentivize current customers on reclaimed water lines to convert irrigation systems and cooling towers from potable water to reclaimed water.

AW will continue to support reclaimed infrastructure projects, development review, and updates to the Centralized Reclaimed Master Plan among other activities. AW will continue developing infrastructure plans related to decentralized reuse for small area planning polygons.

FY22: Anticipated completion of updates to the Centralized Reclaimed Master Plan and development of Decentralized Reclaimed planning products.

FY25: Anticipated completion of the downtown & east Austin core reclaimed loop.

### **Code Changes**

Council approved code changes to Ch. 25-9 to implement water benchmarking, onsite water reuse, and extension of reclaimed water connection requirements.

Staff will continue to prepare for the implementation of approved code changes.

FY22: Benchmarking and extension of reclaimed water connection requirements effective Dec. 1, 2021.

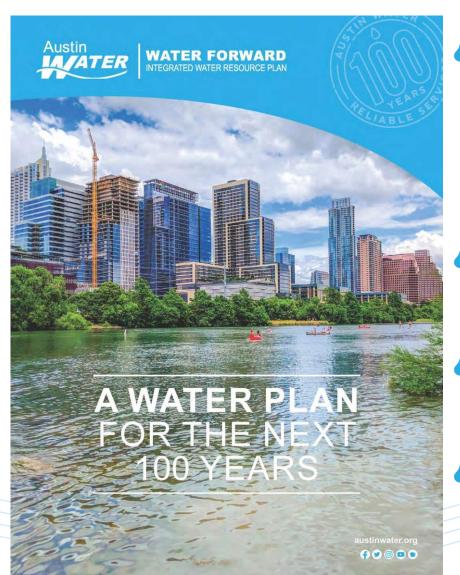
FY23: Onsite water reuse requirement for new developments >250,000 square feet effective Dec. 1, 2023.

## FY21 Annual Report Preview

- Report will be presented to Task Force January 2022
- Fiscal Year 2020-2021 implementation activities included:
  - TWDB adoption of the 2021 Region K water plan
  - Council approval of water benchmarking, onsite water reuse, and extension of reclaimed water connection requirements
  - Completion of My ATX Water pilot and installation of ~14,000 meters
  - Water treatment plant meter accuracy validation study
  - Development of new Voluntary Reclaimed Water Connection incentive
  - Aquifer Storage and Recovery Pilot and Program Management project begun



## Landscape Transformation Ordinances: 2018 Water Forward Plan (Sec. 6.4.5)



- Require water efficient landscapes be installed for new single-family residential developments
  - Such standards already set for new multifamily and commercial developments
  - Could include implementing turf grass and/or irrigation area limitations
- More detailed ordinance concepts/language to be developed with additional public input
- Timing of implementation 2025



## Landscape Transformation Ordinances: Water Savings Estimates

#### **Average Weather Water Savings Summary (in AF per year):**

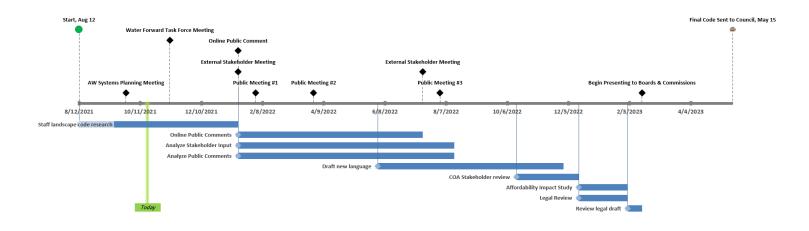
Savings estimates are subject to change dependent on implementation approach and portfolio context.

YEAR	SFR	MFR	СОМ	COA	NRW	TOTAL
2020	0	0	0	0	0	0
2040	2,490	280	460	0	0	3,230
2070	6,440	770	810	0	0	8,020
2115	13,510	1,320	1,750	0	0	16,580

Savings based on an assumed 10% reduction in irrigation water use



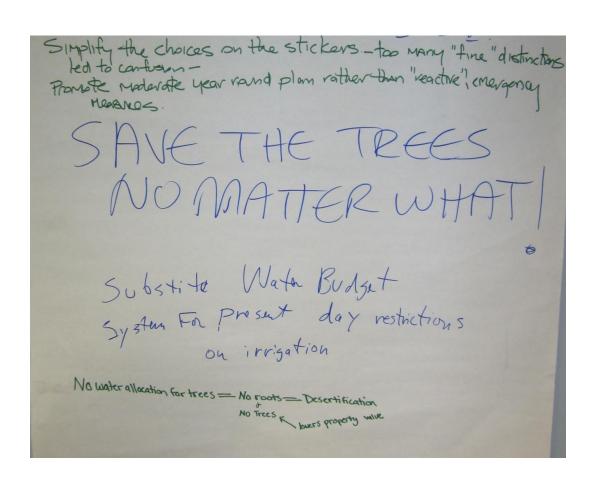
## Landscape Transformation Ordinances: Project Plan



- Creation of Timeline
- Stakeholder Lists
- Activities
- Ranked Options
- Review
- Code Language



## Landscape Transformation Ordinances: Activities



- Internal Stakeholder Meetings
- External Stakeholder Meetings
- Online Public Comment
- Public Meetings
- Legal Review
- Affordability Impact Study
- Boards and Commissions
- Present to Council for Adoption



# Landscape Transformation Ordinances: Stakeholder Groups



## External

- Home Builders Association of Greater Austin (HBA)
- Central Texas Professional Irrigation Association
- Association of Professional Landscape Architects (ASLA)
- Texas Nursery and Landscape Assoc. (TNLA Region 8)

## Internal

- WPD, DSD, AE-GB
- Water and Wastewater Commission
- Resource Management Commission
- Water Forward Task Force
- Equity Office (affordability)



# Landscape Transformation Ordinance: Options



## Irrigation Options

- Enhanced post installation inspection
- Require pressure regulating components
- Limit irrigated area
- Other options

## Landscape Options

- Require a landscape plan to be submitted with the building plans
- One model home per subdivision must not exceed 50% turf grass
- Limit turf grass area
- Other options



## Thank you

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