



# Conservation Quarterly Update

3<sup>rd</sup> Quarter FY20

Resource Management Commission  
August 17, 2020

Mark Jordan  
Water Conservation Division  
City of Austin | Austin Water



01

...

AMI PROJECT

02

...

CONSERVATION ORDINANCES  
in the Land Development  
Code

03

...

PROPOSED  
Conservation  
Ordinances

04

INCENTIVE PROGRAM  
REVISIONS

05

...

NEW INCENTIVE  
PROGRAMS

06

...

FURTHER PROGRAM  
EVALUATION

# 01



## AM Pilot Project



# AMI PILOT PROJECT

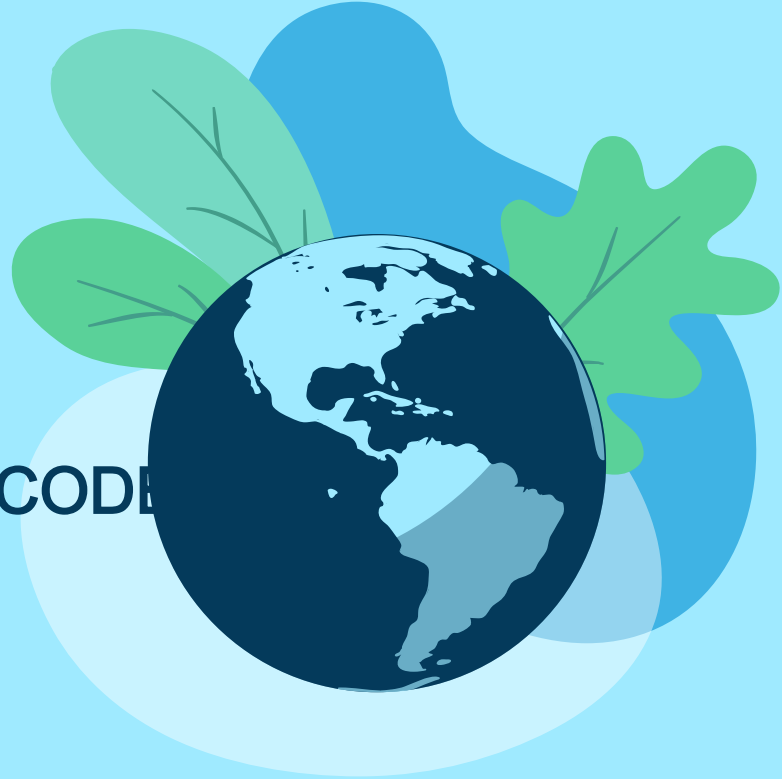


- **5,000** residential customers split between River Place and Mueller
- Locations chosen to test :
  - Transmitting capabilities in difficult terrain
  - Compatibility with different transmission infrastructure
- **Sept. 14** – AMI meter installation begins with WaterSmart customer portal
- Full deployment over next five years
- [www.MyATXWater.org](http://www.MyATXWater.org)

# 02



## WATER CONSERVATION ORDINANCES IN THE LAND DEVELOPMENT CODE





## 23-9D-1040 Development Project Requirements

### (A) Water Benchmarking and Water Balance Calculation.

(1) Applicability. This subsection applies to a small or large development project for which a site plan application under Division 23 -6B-2 (Site Plan Review) is submitted on or after June 1, 2020.

### (2) Director's Review and Approval.

(a) A site plan application must include a completed water benchmarking application and water balance calculator.

(b) Approval of the water benchmarking application and water balance calculator by the director is required as a condition of site plan approval.

(B) Director Consultation Required. In addition to the requirements in Subsection (A), an applicant requesting approval of a large development project must meet with the director prior to site plan release to discuss water efficiency code requirements, water use benchmarking data, and incentives and rebates for alternative water use.

## 23-9D-1030 Reclaimed Water Connection Requirements

- (A) A small development project located within 250 feet of a reclaimed water line shall connect to a reclaimed water line and use reclaimed water for irrigation, cooling, toilet flushing, and other significant non-potable water uses identified in the water balance calculator.
- (B) A large development project shall connect to a reclaimed water line and use reclaimed water for irrigation, cooling, toilet flushing and other significant non-potable water uses identified in the water balance calculator if the large development project is located within 500 feet of a reclaimed water line.
- (C) The director may grant a variance for the requirements of this section for:
  - 1) Small development projects if site conditions are such that compliance would represent a significant financial hardship or health risk to the applicant or the public;
  - 2) Large development projects if site conditions are such that compliance would represent a health risk to the applicant or the public; or
  - 3) Municipal uses associated with law enforcement or public health and safety.

### 23-9D-1050 Onsite Water Reuse System Rules and Incentive Program

(A) An onsite water reuse system is required for a large development project for which a site plan application is submitted under Division 23 -6B-2 (Site Plan Review ) on or after December 1, 2023.

(B) By December 1, 2020, the director shall:

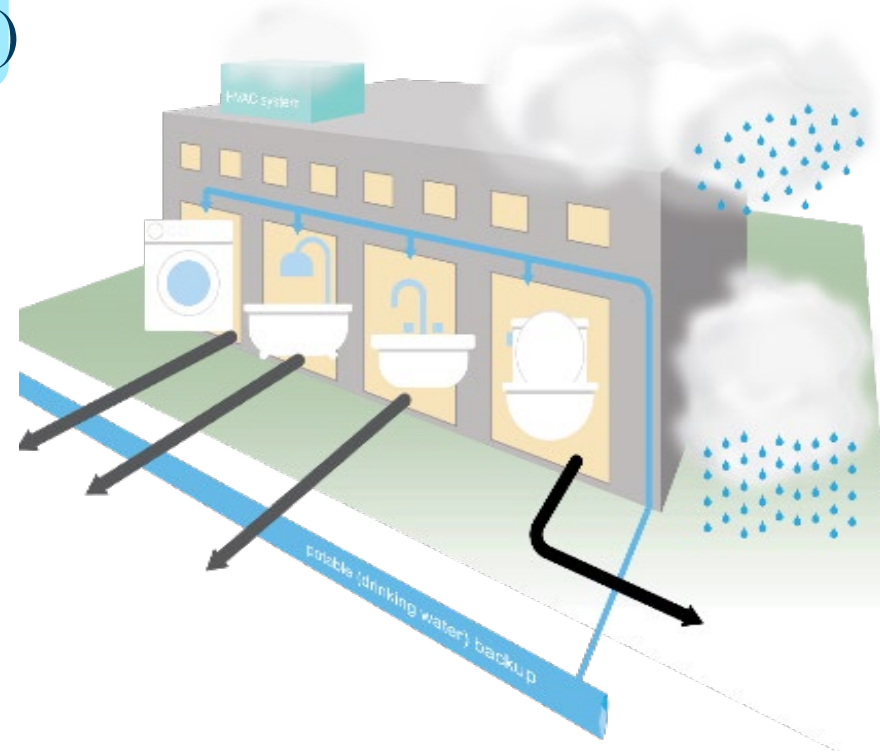
- (1) Adopt rules to implement, administer, and enforce this article, including rules to regulate the treatment, monitoring, and reporting requirements for onsite water reuse systems; and
- (2) Develop an incentive program for onsite water reuse systems





## “NONTRADITIONAL” INCENTIVES FOR ALTERNATIVE WATER SYSTEMS (OCT 2020)

- Applies to new commercial development >250,000 SQ FT
- Impact fee reductions based on potable water offset
- \$1 Million grant program
- “Bucks for Business” rebate of up to \$100,000 still available for smaller projects



# 03



## PROPOSED CONSERVATION ORDINANCES



# COOLING TOWERS (DEC 2020)



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

# IRRIGATION METER WAIVER (DEC 2020)



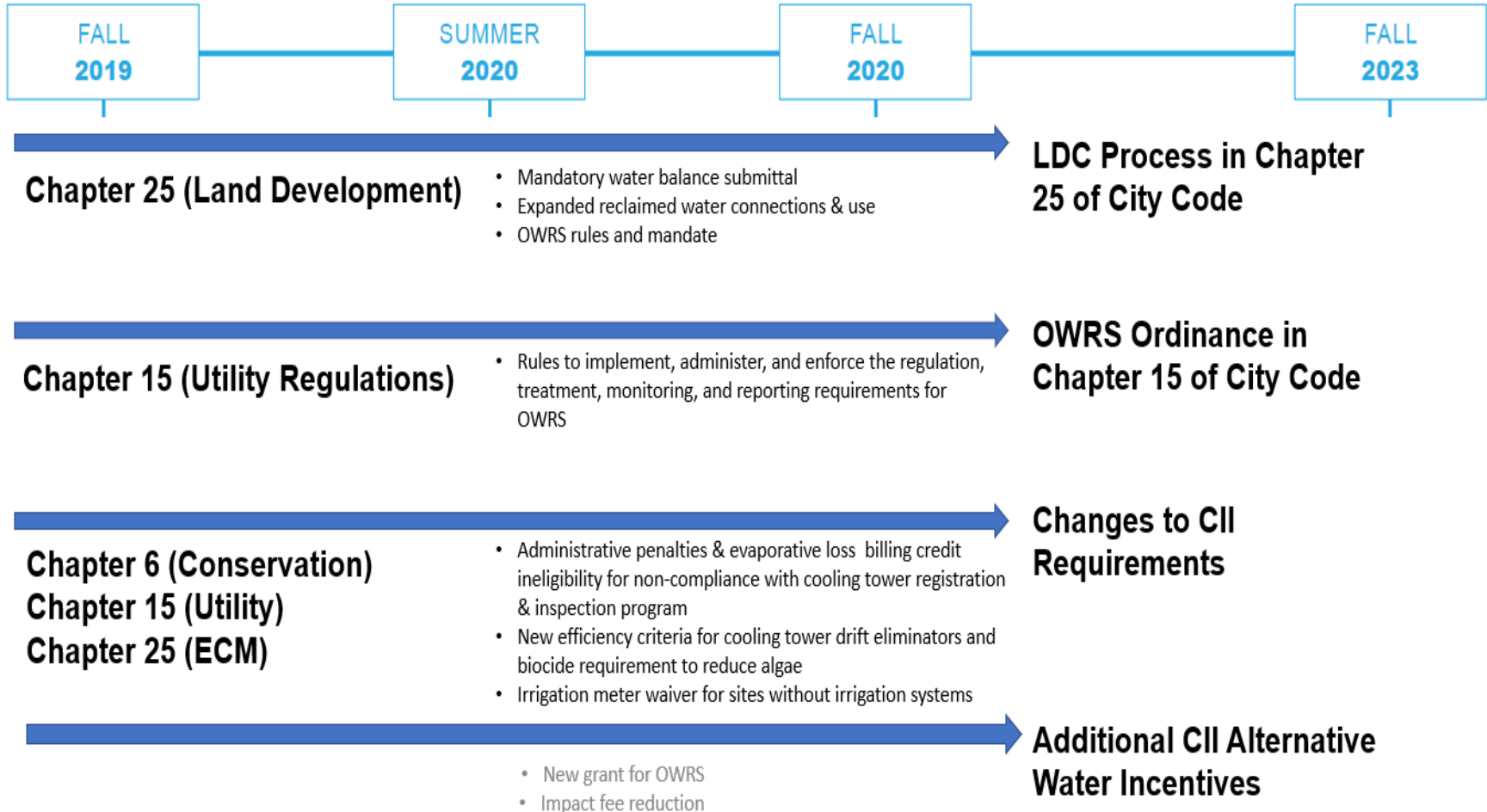
- Allows waiver of separate irrigation meter requirement for commercial/multi-family facilities if:
  - Over 90% impervious cover (mainly in Central Business District)
  - No irrigation system requirement under landscaping ordinances
  - Adequate hose bibs to meet outdoor water needs
- Incentivizes the capping, removal or non-installment of automatic irrigation systems by avoiding associated costs and tap fees

# RESIDENTIAL LANDSCAPE (JUNE 2023)

- Limits 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
- Originally proposed under 140 Plan



# WATER CONSERVATION ORDINANCE TIMELINE



# 04



## INCENTIVE PROGRAM REVISIONS



# INCENTIVE PROGRAM REVISIONS

## INCREASED INCENTIVE AMOUNTS (DEC 2019)

Based on updated cost benchmark of  
\$1.00/1,000 gallons saved for  
avoided/delayed LCRA payments

## REVISED “BUCKS FOR BUSINESS” (DEC 2019)

Water balance using AW  
approved calculator required  
for alternative water systems

Annual progress reports required  
for alternative water systems  
in new development





# COMMERCIAL IRRIGATION SYSTEM IMPROVEMENT (MARCO)



## INCREASED REBATE . . .

...for central computer controller system from \$5,000 to \$10,000.

## ADDED . .

..pressure reduction components (other than PRV).

## REMOVED .

...once-per-lifetime application limitation to allow phased applications for larger commercial properties .

# WATERWISE LANDSCAPE (JUNE 2020)



## ADDED • • •

...flexibility to landscape fabric and compost requirements.

## ADDED • • •

...pervious gravel uncovered patios to list of qualifying landscaping features to replace turf grass.

## PROHIBITED • • •

...installation of permanent irrigation system.

# RESIDENTIAL IRRIGATION SYSTEM UPGRADE (MARC



## INCREASED

...total rebate cap for each property from **\$400** to **\$1,000**



## INCREASED

..rebates for **PRV** and converting from spray to **multi -stream, multi -trajectory** rotor nozzles



## INCREASED

..the rebate from **\$50** to **\$100** for the removal of an irrigation zone



## ADDED

..**new rebate** for conversion to 6-inch pop-up sprinkler heads



## STREAMLINED

..invoice **submission process** for parts and labor



# 05




## NEW INCENTIVE PROGRAMS



# HOME WATER USE MONITORING (JUNE 2020)

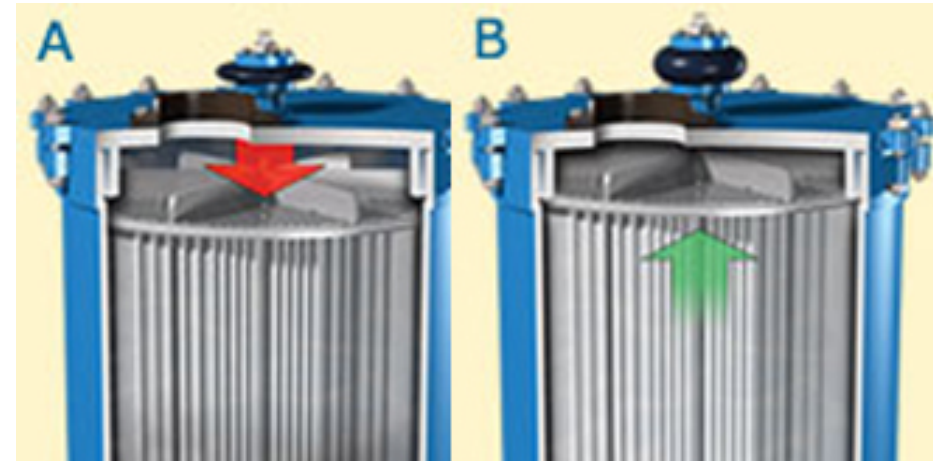
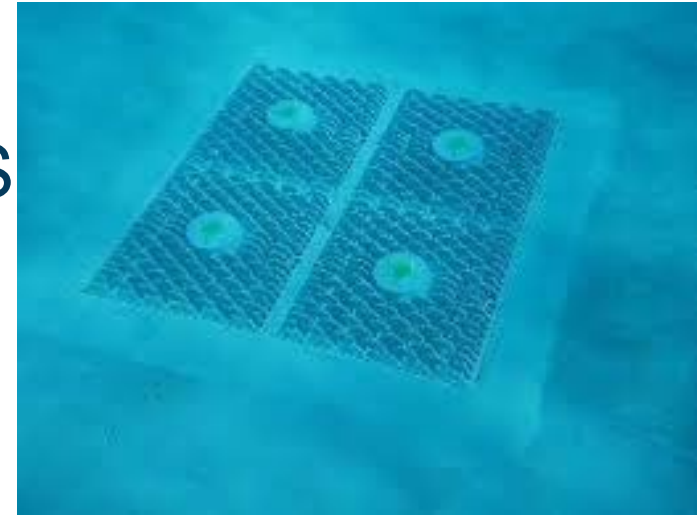
- Pilot rebate of up to \$200
- Near real time consumption data
- More immediate and discrete data than AMI
- Self-installed product
- Provides reads to smart phone app
- Quick, cost effective deployment
- Interim measure until full deployment of AMI and WaterSmart
- **Eligible products**
  - Buoy
  - Flo
  - Flume
  - Pani
  - PhynPlus
  - Streamlabs Control






## POOL CARTRIDGE BACKWASH FILTER (JUNE 2020)

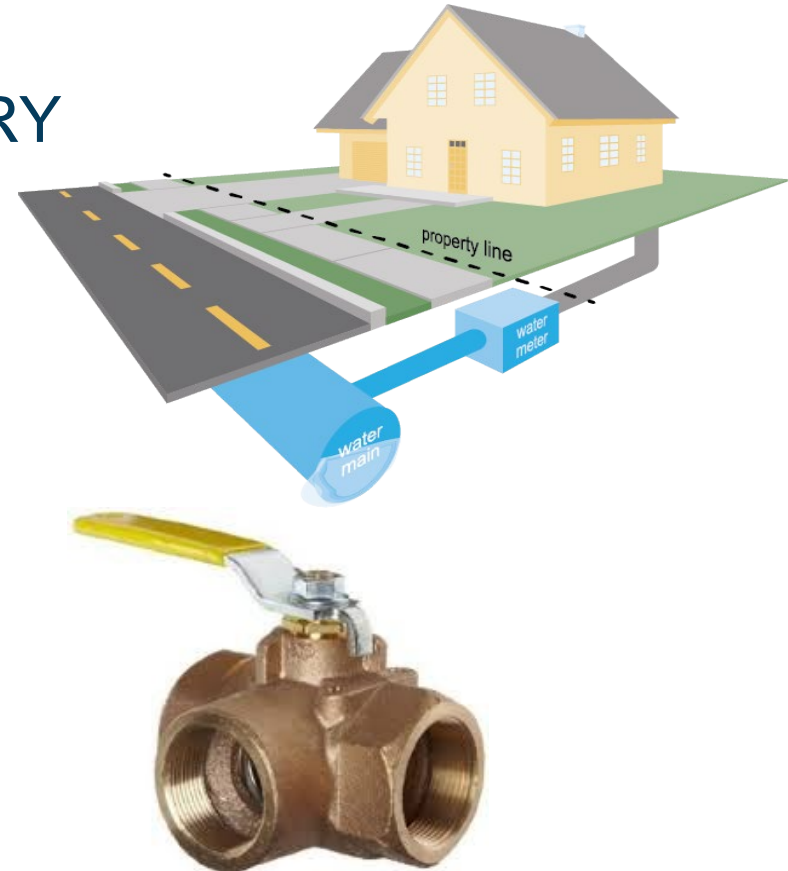
- Up to \$250 to replace sand or DE pool filter with more water efficient cartridge pool filter





## GRAYWATER REUSE: “LAUNDRY LANDSCAPE” (SEPT 2020)

- Up to \$100 rebate for 3 -way diverter valve and gravity fed system
- 10% of total rebate added if combined with Rainwater Harvesting, WaterWise Landscape or WaterWise Rainscape program
- Water from kitchen sinks, diaper soiled water, and "blackwater" (toilet flush water) not included
- Backflow protection, permitting and enforcement an issue for graywater other than Laundry to Landscape systems
- Aquifer recharge zone limitations



# 06

...

INCENTIVE PROGRAMS  
FOR FURTHER  
EVALUATION





# REEVALUATING THE RAINWATER HARVESTING REBATE



## COST VS. SAVINGS

Current rebate amount significantly **exceeds** cost benchmark; RWH systems **save significantly less** potable water than assumed



## USAGE

Customers with RWH systems in the aggregate using **more potable water** than other customers without RWH systems



## PRESSURIZATION

Pressurized systems **not shown to save** more water than non-pressurized



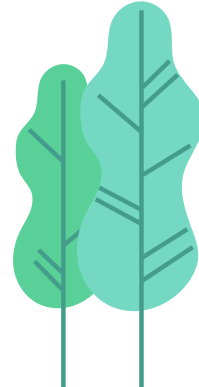
## CUSTOMER BENEFIT

Maintaining or increasing rebate amount for water quality protection that does not also result in a potable water offset needs **further evaluation** for benefit to AW customer based on cost of service requirements



## FEE REDUCTION

Drainage fee reduction available to properties with RWH



# COMMERCIAL IRRIGATION SYSTEM ABANDONMENT

- Rebate would be similar to residential program i.e., cut out the valves for each station; cap the main irrigation lines
- Section 2.4.6 (B) Environmental Criteria Manual (Model Landscape Ordinance) requirements to install an irrigation system to establish and maintain newly planted trees and required landscaping areas may conflict with rebate
- Section 2.9.2(F)(2) Utility Criteria Manual requirement for commercial and multi-family facilities to install a separate meter for common areas and outdoor purposes may conflict with the rebate unless waived
- Requirement to pay fees for irrigation meter to system that has been abandoned would be an impediment to rebate participation unless waived
- Concerns from the landscaping community about the ability to adequately water trees and maintain the city's tree canopy





# QUESTIONS

**Mark Jordan**  
**Water Conservation Division**  
**Manager (Acting)**  
**City of Austin | Austin Water**  
**512-974-3901**  
**[mark.jordan@austintexas.gov](mailto:mark.jordan@austintexas.gov)**



## ALTERNATIVE WATER SOURCES

## END USES

ROOF RUNOFF



BLACKWATER



GREYWATER



STORM WATER



COOLING  
TOWERS



TOILET  
FLUSHING



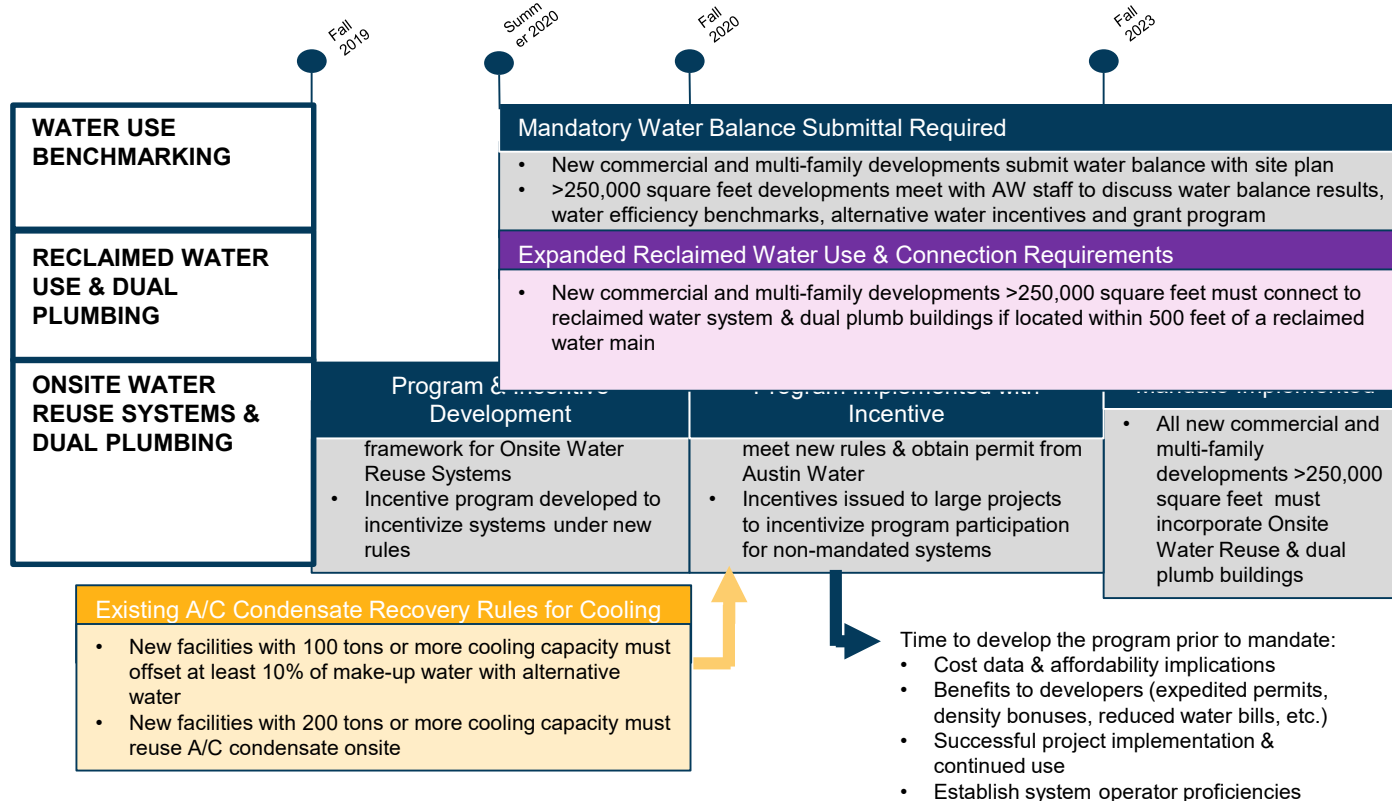
CLOTHES  
WASHING



UNRESTRICTED  
IRRIGATION



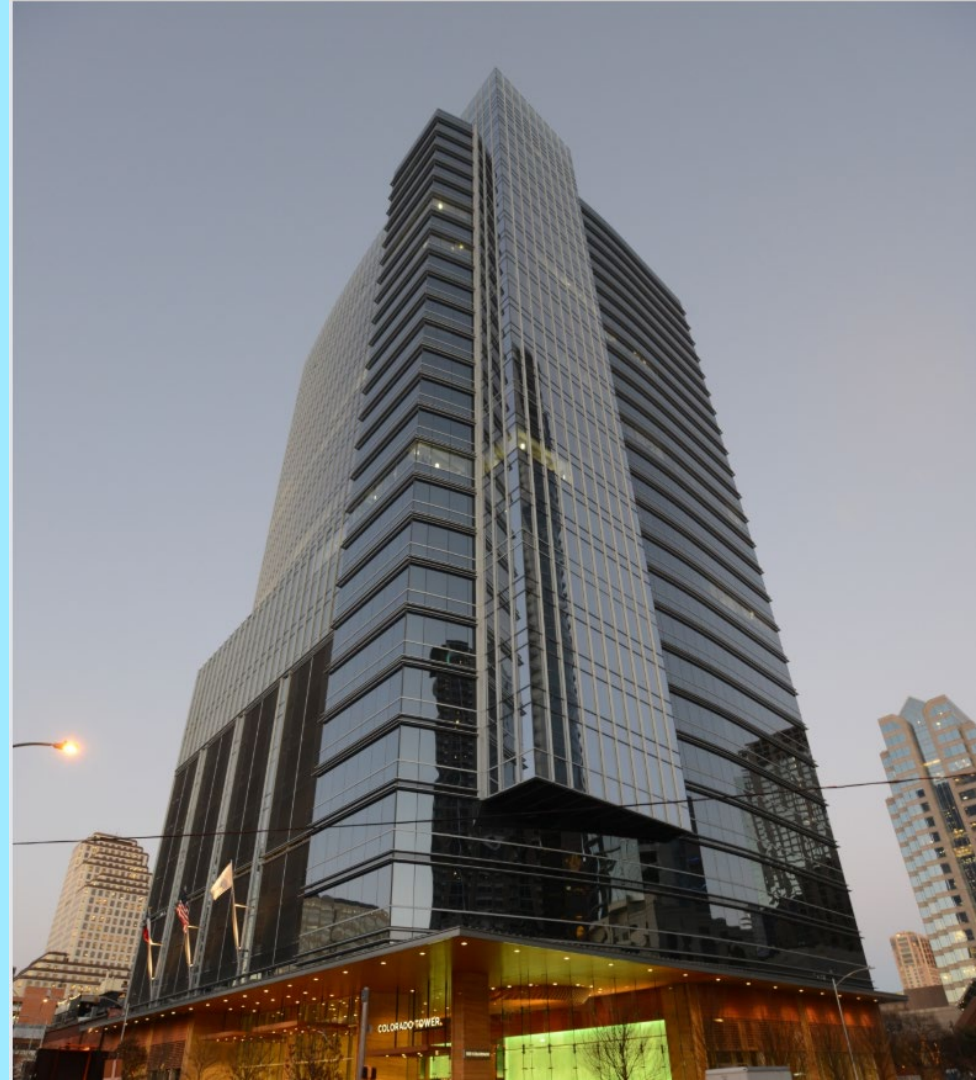
## ALTERNATIVE WATER ORDINANCES APPROACH





## LARGE DEVELOPMENT PROJECT

The construction of one or more multi-family, mixed use or commercial buildings on one or more parcels in accordance with a phased plan or approved site plan, with a total gross floor area for the building(s) of 250,000 square feet or more.





• • •

## SMALL DEVELOPMENT PROJECT

The construction of one or more multi-family, mixed use or commercial buildings on one or more parcels in accordance with a phased plan or approved site plan, with a total gross floor area for the building(s) of less than 250,000 square feet.

