



# **WATER FORWARD**

INTEGRATED WATER RESOURCE PLAN

Austin Integrated Water Resource Planning Community Task Force

Packet Index

November 5, 2019

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**Austin Integrated Water Resource Planning Community Task Force**  
**November 5, 2019 – 4:00 p.m.**  
**Waller Creek Center, Room 104**  
**625 East 10<sup>th</sup> Street**  
**Austin, Texas 78701**

**For more information go to:**  
**[Austin Integrated Water Resource Planning Community Task Force](#)**

## **AGENDA**

### **Voting Members:**

Sharlene Leurig - Chair	Perry Lorenz	Vanessa Puig-Williams
Jennifer Walker – Vice Chair	Robert Mace	Sarah Richards
Todd Bartee	Hani Michel	Lauren Ross
Diane Kennedy	Bill Moriarty	

### **Ex Officio Non-Voting Members:**

Austin Water: Greg Meszaros  
Austin Energy: Kathleen Garrett  
Austin Resource Recovery: Tony Davee  
Neighborhood Housing and Community Development: Josh Rudow  
Office of Innovation: Kerry O'Connor  
Office of Sustainability: Lucia Athens  
Parks and Recreation: Liana Kallivoka  
Watershed Protection: Mike Personett

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### **1. CALL TO ORDER – November 5, 2019 4:00 p.m.**

### **2. CITIZEN COMMUNICATION**

The first 10 speakers signed up prior to the meeting being called to order will each be allowed a three-minute allotment to address their concerns regarding items not posted on the agenda.

### **3. APPROVAL OF MEETING MINUTES**

- a. Approval of the meeting minutes from the September 3, 2019 Task Force meeting (5 minutes)

#### **4. STAFF BRIEFINGS, PRESENTATIONS, AND OR REPORTS**

- a. Ordinance Development Update – City Staff (20 minutes)
  - i. Task Force Questions and Discussion
- b. Advanced Metering Infrastructure Update – City Staff (30 minutes)
  - i. Task Force Questions and Discussion
- c. Lead Service Abatement Update – City Staff (30 minutes)
  - i. Task Force Questions and Discussion

#### **5. VOTING ITEMS FROM TASK FORCE**

- a. Discuss and consider approval of proposed meeting schedule for 2020 (10 minutes)

#### **6. FUTURE AGENDA ITEMS**

#### **7. ADJOURN**

Note: Agenda item sequence and time durations noted above are subject to change.

The City of Austin is committed to compliance with the American with Disabilities Act. Reasonable modifications and equal access to communications will be provided upon request. Meeting locations are planned with wheelchair access. If requiring Sign Language Interpreters or alternative formats, please give notice at least 2 days (48 hours) before the meeting date. Please call Austin Integrated Water Resource Planning Community Task Force, at 512-972-0194, for additional information; TTY users route through Relay Texas at 711.

For more information on the Austin Integrated Water Resource Planning Community Task Force, please contact Marisa Flores Gonzalez at 512-972-0194.

# MINUTES



The Austin Integrated Water Resource Planning Community Task Force convened in a Regular Meeting on September 3, 2019 at Waller Creek Center, Conference Rm 104, 625 E 10<sup>th</sup> Street, in Austin, Texas.

**Members in Attendance:**

Sharlene Leurig - Chair

Jennifer Walker – Vice Chair

Sarah Richards

Diane Kennedy

Bill Moriarty

Hani Michel

Perry Lorenz

Robert Mace

**Ex-Officio Members in Attendance:**

Josh Rudow, Lucia Athens, Matt Russell

**Staff in Attendance:**

Kevin Critendon, Daryl Slusher, Teresa Lutes, Marisa Flores Gonzalez, Matt Cullen, Charlie Maddox, Katherine Jashinski, Joe Smith, Mark Jordan, Kayla Miloy, Sarah Hoes, Heather Cooke

**Additional Attendees:**

David Foster, Adam Conner, James Dwyer, Gopal Guthikonda

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**1. CALL TO ORDER**

Chair Leurig called the meeting to order at 6:06 p.m.

**2. CITIZEN COMMUNICATION: GENERAL**

- a. David Foster of Clean Water Action spoke on lead service line abatement approaches.
- b. Ted Siff of the Shoal Creek Conservancy spoke on the Shoal Creek Watershed Master Plan development.

**3. APPROVAL OF MEETING MINUTES**

The meeting minutes from the July 9, 2019 Austin Integrated Water Resource Planning Community Task Force regular meeting were approved as presented on Member Mace's motion and Member Walker's second with Chair Leurig and Member Michel abstaining for a final 6-0-2-2 vote.

**4. STAFF BRIEFINGS, PRESENTATIONS, AND/OR REPORTS**

- c. A staff update on Aquifer Storage and Recovery was provided by Teresa Lutes, Austin Water. This was followed by Task Force discussion and input.
- d. A staff update on ordinance development was provided by Katherine Jashinski, Austin Water. This was followed by Task Force discussion and input. It was discussed that a meeting will be scheduled for the Ordinance Subcommittee of the Water Forward Task Force.
- e. A staff update on lead services was provided by Matt Cullen and Charlie Maddox, Austin Water. This was followed by Task Force discussion and input.

**5. FUTURE AGENDA ITEMS**

None

**6. ADJOURN**

Chair Leurig adjourned the meeting at approximately 8:34 pm.

# **PRESENTATION**



## Agenda

1. Ordinance Development Update
2. Advanced Metering Infrastructure Update
3. Lead Service Abatement Update
4. Discuss and consider approval of proposed meeting schedule for 2020

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# Ordinance Development Update

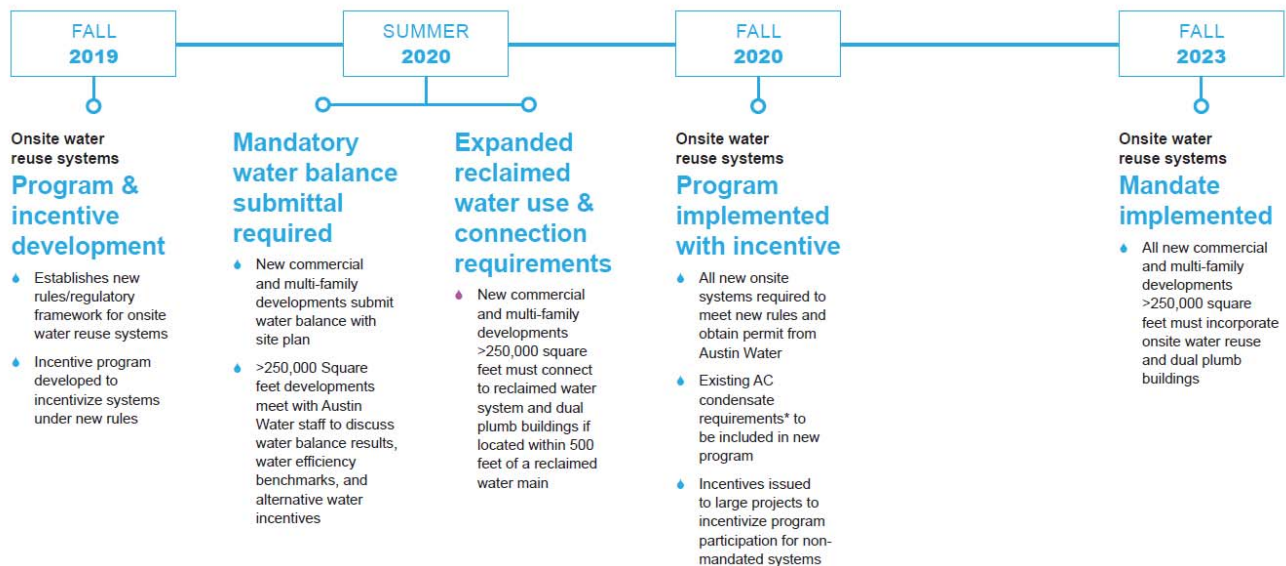
Marisa Flores Gonzalez

Water Forward Program Manager

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## WATER FORWARD ORDINANCES IN THE LAND DEVELOPMENT CODE

### Summary of Draft Code Language





## October 16<sup>th</sup> Open House Events

AW staff held two public events, one in the morning and one in the evening.

- Staff-facilitated informational boards
- Presentation of draft code language text
- Laptops to provide input via the LDC participation webpage



## Comments from the Downtown Austin Alliance

**Recommendations were sent to Assistant City Manager Gonzales and the Code Rewrite Team on the following:**

- Regulations for new development adjacent to and near Waller Creek in downtown
- Proposed regulations by Austin Water Utility related to the Austin Water Forward Plan
- Code amendments and Drainage Criteria Manual revisions related to Atlas 14 Rainfall Study

**The recommendations included a statement of appreciation for City staff:**

“Regarding Austin Water Forward and Atlas 14 proposed regulations, we truly appreciate the opportunities for stakeholder input provided by both Austin Water Utility and the Watershed Protection Department. Throughout these stakeholder engagement processes, the staff took the time to coordinate with us, participated in meaningful dialogue with our members and were collaborative and responsive. Thank you for supporting this type of engagement.”



## Citywide Meetings

Wed., Oct. 23: **Open House & Office Hours #2**, 6-9pm, Austin Central Library, 710 W. Cesar Chavez

Sat., Oct. 26: **Planning Commission Public Hearing**, 9am, Austin City Hall, 301 W. Second

Tue., Oct. 29: **Proposed Planning Commission Special Meeting on LDC**

Wed., Nov. 6: **Proposed Planning Commission Special Meeting on LDC**

Tue., Nov. 12: **Planning Commission Regular Meeting** including vote and recommendations to Council

Mon., Nov. 18: **Council Work Session** on the draft land development code revision

Tue., Dec. 3: **Council Work Session** on the draft land development code revision

Wed., Dec. 4: **Council Work Session** on the draft land development code revision

Sat., Dec. 7: **Council Public Hearing** on the draft land development code revision

Mon., Dec. 9: **City Council consideration on first reading**



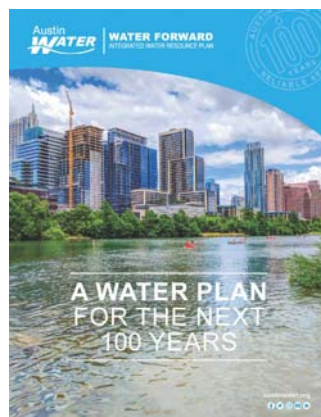
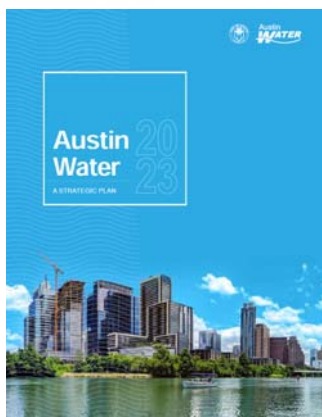
## Questions and Discussion

# Advanced Metering Infrastructure and Lead Services Updates

Rick Coronado, P. E.

Assistant Director, Operations

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## ADVANCED METERING INFRASTRUCTURE

## Austin Water AMI Link

<http://www.austintexas.gov/AMI>

**Austin Water ADVANCED METERING INFRASTRUCTURE (AMI)**

**Advanced Metering Infrastructure (AMI)**

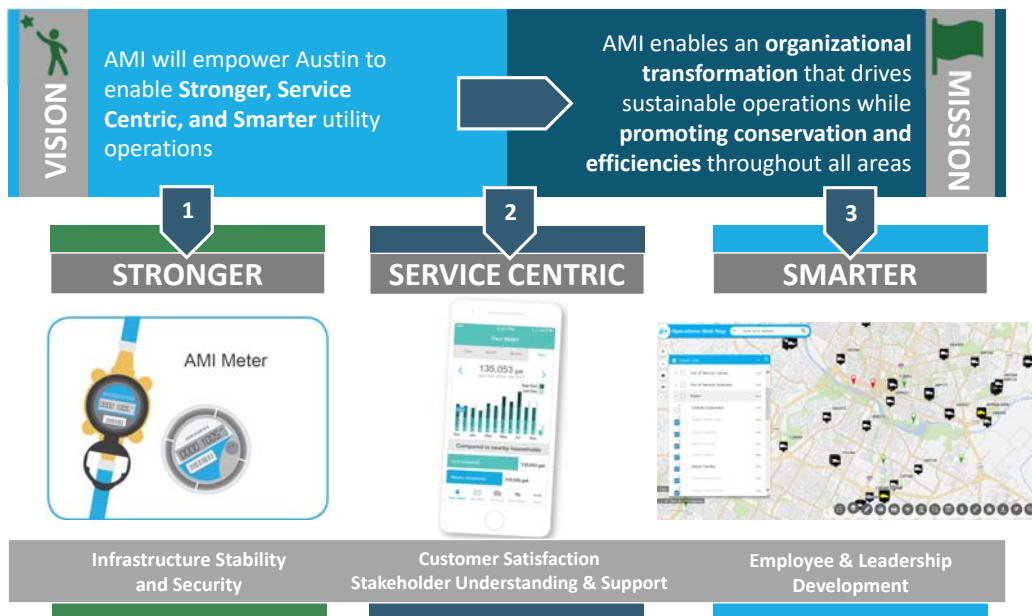
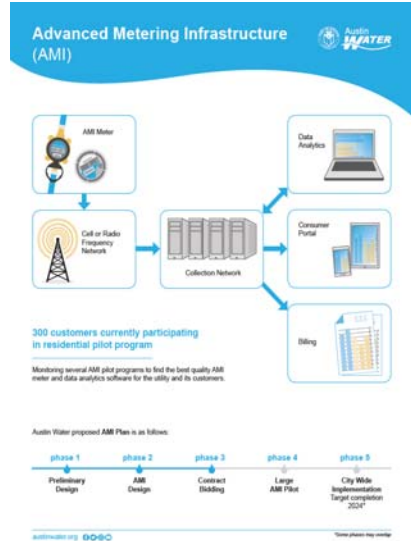
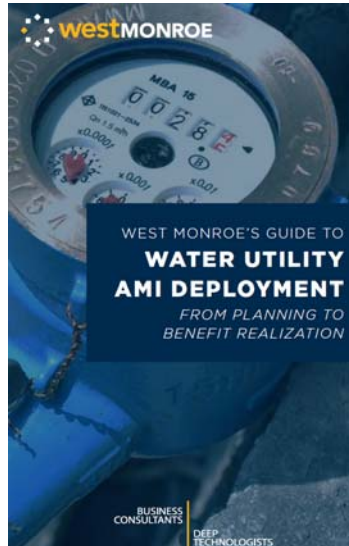
In January 2015, Austin Water launched its Advanced Metering Infrastructure (AMI) Steering Committee, charged with the responsibility of evaluating, recommending and overseeing the implementation of AMI for our service area. Austin Water (AW) is utilizing various technologies and innovative methods in managing the city's infrastructure and continues to monitor several AMI pilot programs in real time, as well as water data management systems to find the best quality smart meter and data analysis software for the city and its customers.

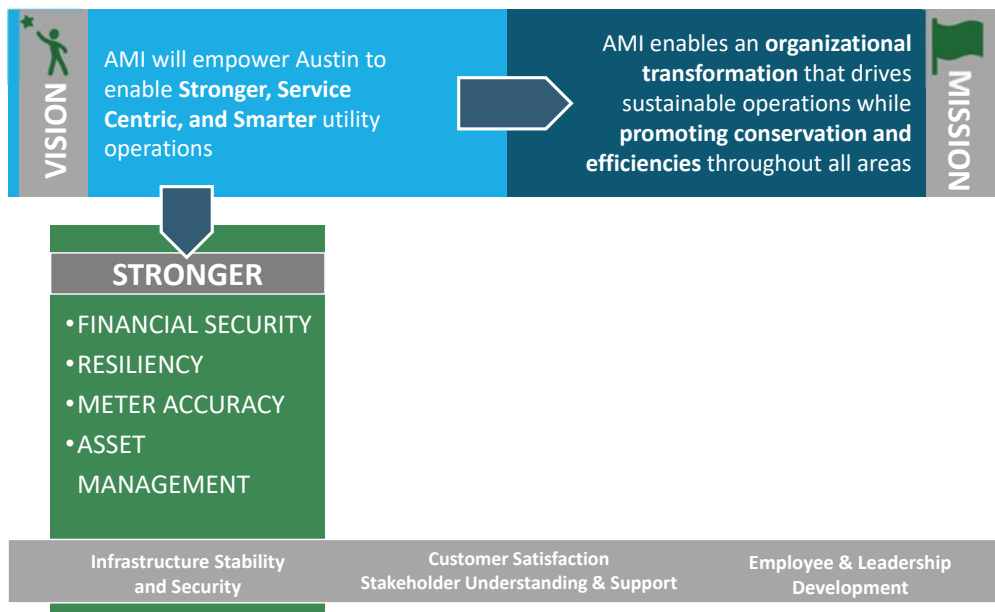
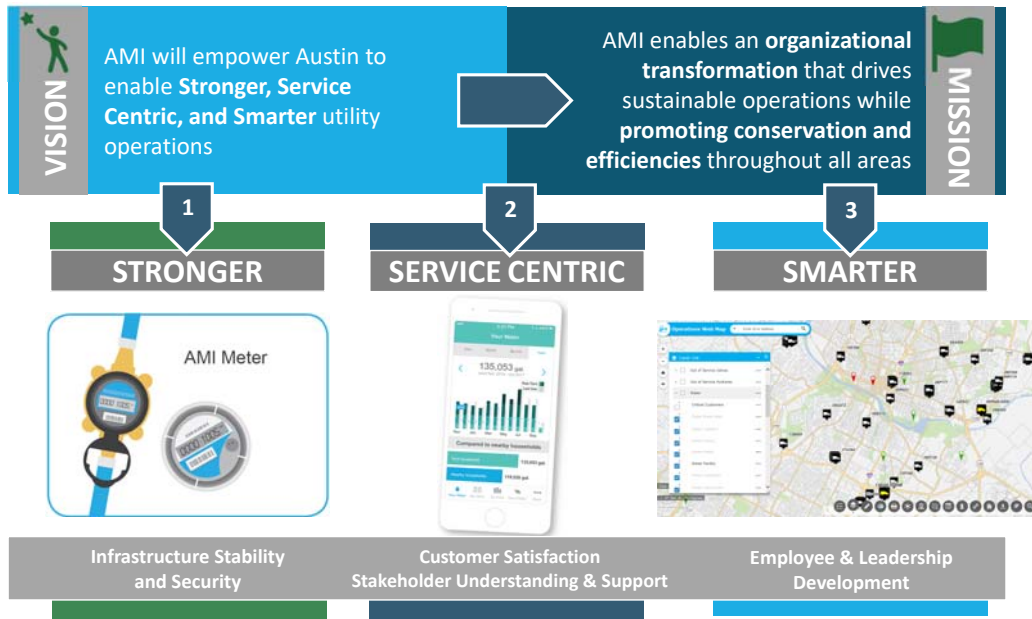
Even though all water meters are still being manually read for billing purposes, Austin Water has been conducting several AMI pilot programs to study how AMI will change the behavior of utility customers and how to use AMI to improve Austin Water's customer service. The ability to try these new technologies in a low-risk situation and identify some of the issues that need to be addressed before Austin Water can transition to smart meters is invaluable.

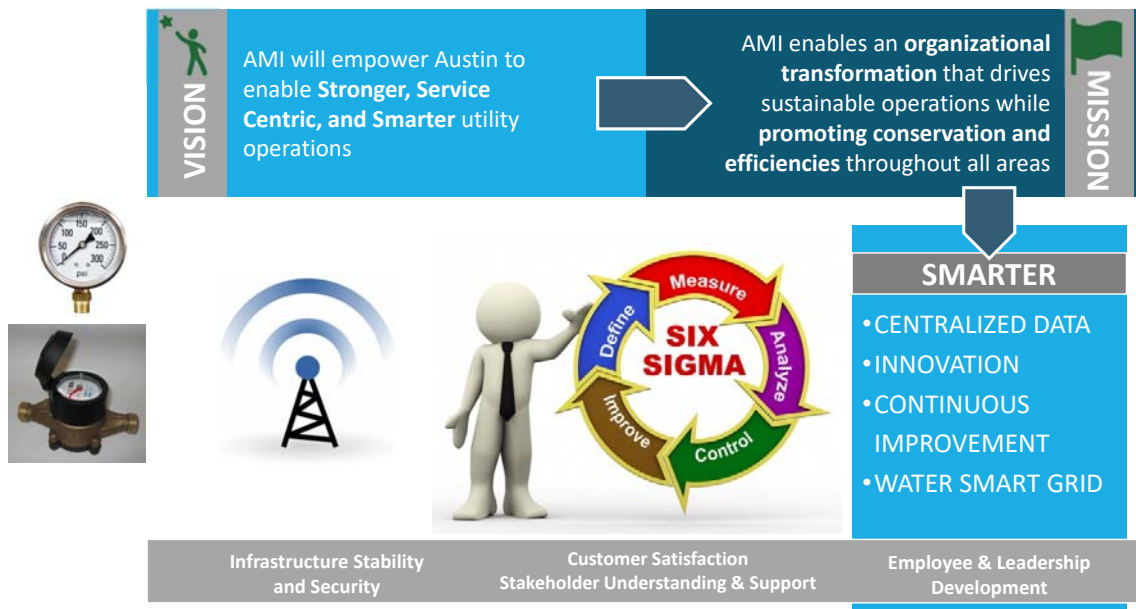
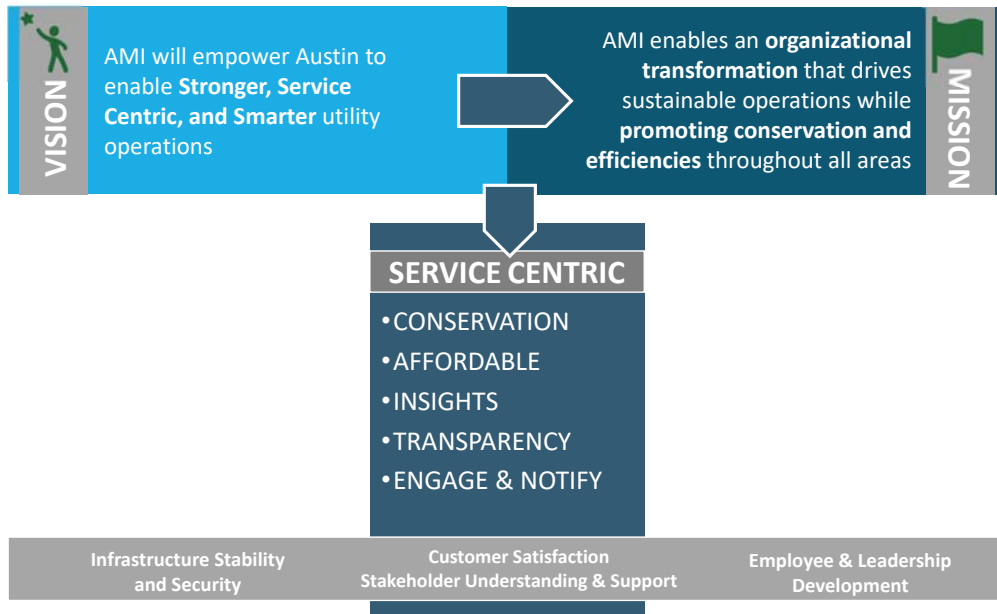
Through three initial pilot programs, Austin Water has gained experience and knowledge in working with smart meter installation, communication, and data management. At the same time, we are learning and testing from the experiences of other utilities as they also explore smart meter programs.

At the start of 2015, Austin Water began contract negotiations with consultant company, West Monroe Partners to provide consulting services for advanced meter infrastructure program management, to guide the city on developing a business case for meter upgrades.

[austintexas.gov](http://austintexas.gov)

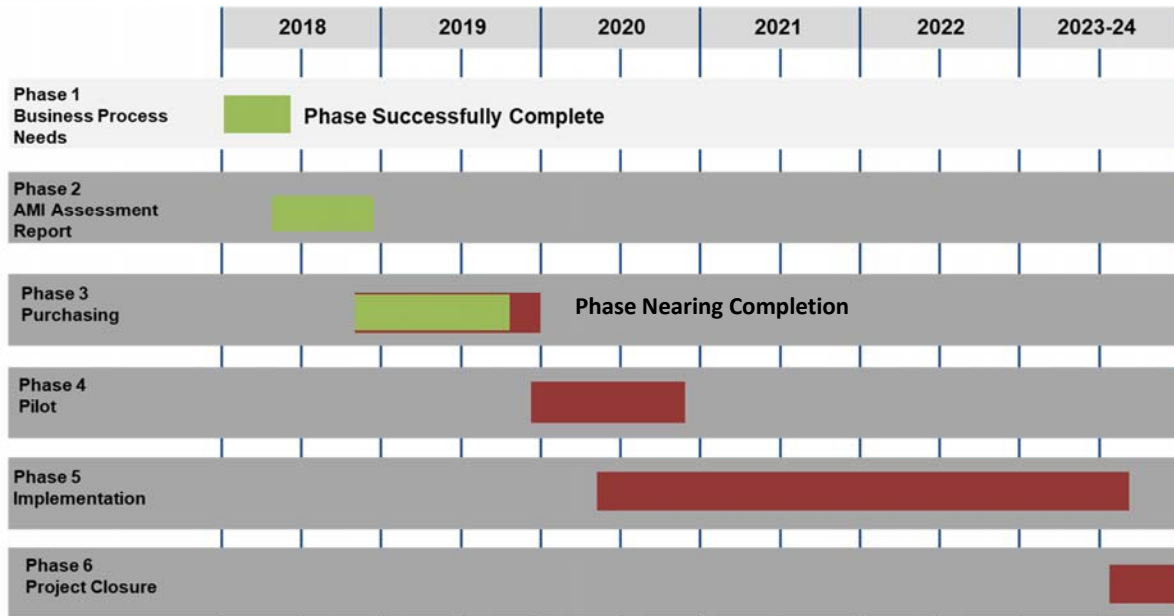




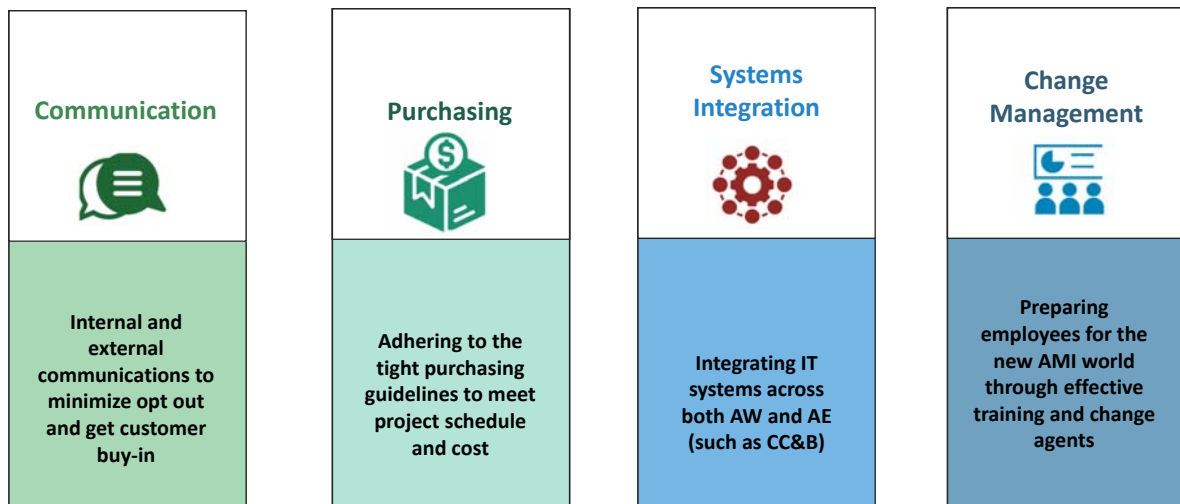




## OVERALL PROGRAM PROGRESS



## KEY PROJECT OPPORTUNITIES



## PREPARATION PROJECTS

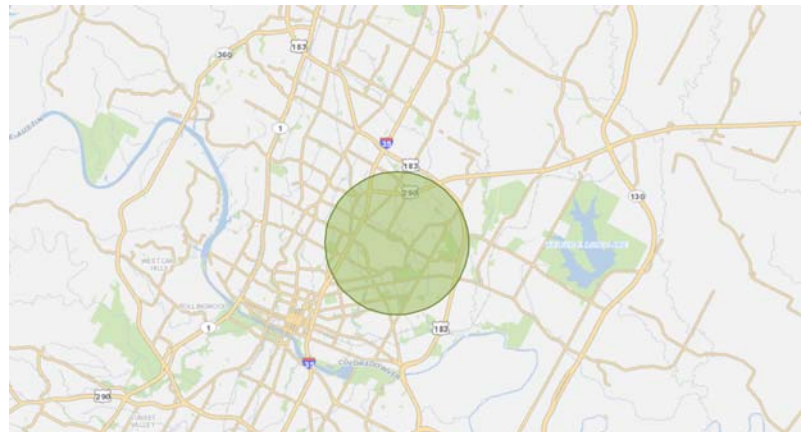
- AW Steering Committee / Program Team
  - Staffing Plan
  - Service Level Agreements
  - AE Business Partners
  - Communication – West Monroe / Group Solutions
  - Change Management Champions
- Bench Scale Test Equipment (Updated Technology)
- Large meter exchanges
  - Insourcing (40+ completed)
  - Contract Services (Prebid)
- Meter Box Inspections
  - Lead Services (Insourcing)
  - Pilot Area and Unknown locations ~ 10K+ by 2020



## NEXT UPDATE

### Pilot Area(s)

- Pilot Area Update
- Features of System
- Manual Read Process
- Communication Plan
- Service Inspection Update
- Opportunities Update



Sample Area



## Questions and Discussion

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## Discuss and consider approval of proposed meeting schedule for 2020

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- Proposed meeting schedule for 2020
  - January 7
  - March 3
  - May 5
  - July 7
  - September 1
  - November 10
- Schedule subject to change per room availability
- Meetings to be held at 4pm at locations to be determined
  - Room 104 will be unavailable due to renovations

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## Questions and Discussion

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# BACKUP MATERIALS

# Water Forward Ordinances

## What are alternative waters?

Alternative waters include centralized reclaimed water or decentralized onsite rainwater, storm water, graywater, blackwater and air conditioning condensate to meet non-potable water needs. Non-potable water needs do not require drinking water for uses such as outdoor watering, decorative water features, toilet flushing, clothes washing, pavement and building washing, and cooling tower make-up water.

For more information visit [austintexas.gov/waterforward](http://austintexas.gov/waterforward) or contact

**Marisa Flores Gonzalez**  
Water Forward Program Manager  
[marisa.flores@austintexas.gov](mailto:marisa.flores@austintexas.gov)

Austin's 100-year water plan, [Water Forward](#), was approved by the Austin City Council on November 29, 2018. The plan calls for increased conservation, use of alternative waters, and storage strategies for use during drought.

On May 2, 2019, the Austin City Council directed staff to work on an accelerated schedule, where feasible, to include regulatory requirements for developments >250,000 square feet related to water benchmarking, dual plumbing, alternative water, and landscape transformation in the Land Development Code Revision that is scheduled for adoption in December 2019.

## Stakeholder Engagement

In response to Council direction, Austin Water began a stakeholder engagement process to help inform development of ordinance language. Public workshops were held on June 25, 2019 and July 23, 2019.

Presentations and videos from the stakeholder workshops are available at [austintexas.gov/waterforward](http://austintexas.gov/waterforward).

Key takeaways from the workshops included:

- ◆ Stakeholders suggested creating an incentive program for alternative onsite water systems to inform future requirements.
- ◆ Clarification on the definition of a development project is needed.
- ◆ More information about alternative onsite water system costs vs. benefits is needed. There is a desire for developer incentives to offset system costs.
- ◆ Stakeholders would like to see more interdepartmental coordination during review of their development projects and not additional regulatory barriers.

## Summary of Proposed Ordinance Changes

Austin Water considered input from stakeholders and the Water Forward Task Force in developing the draft Water Forward ordinance changes that were submitted for inclusion in the Land Development Code Revision. Austin Water staff has proposed the following ordinance changes:

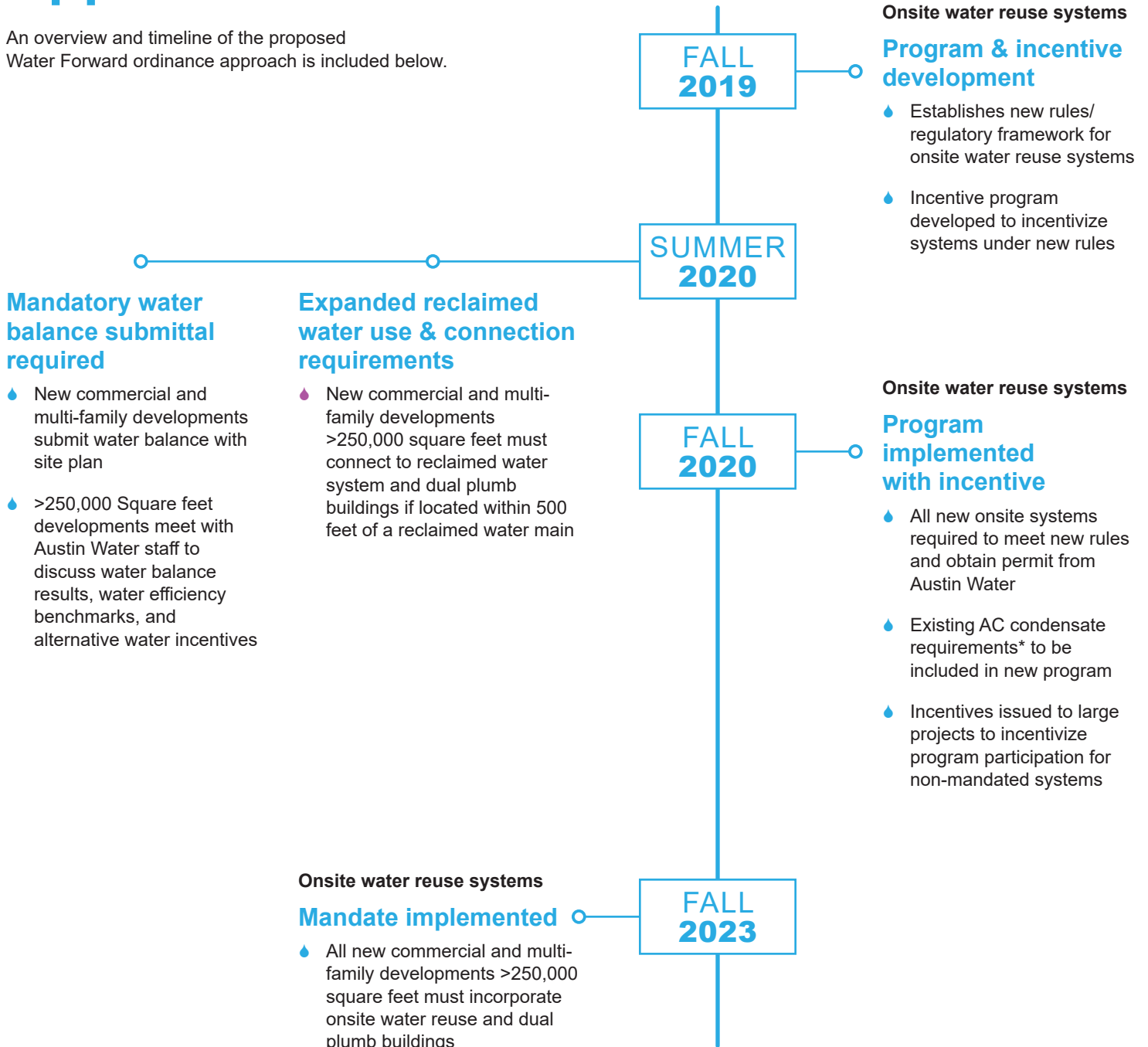
- ◆ Mandatory water balance submittal for new commercial and multi-family development and expanded reclaimed water use and connection requirements in Summer 2020
- ◆ Onsite water reuse systems and dual plumbing
  - Regulatory framework for onsite systems and incentive program to be implemented in Fall 2020
  - Mandatory requirements for commercial and multi-family developments over 250,000 square feet to be effective in 2023

Austin Water staff have also coordinated with City staff leading the revision of the City's Landscape Ordinance to work toward reducing water demand.



# Proposed Ordinance Approach

An overview and timeline of the proposed Water Forward ordinance approach is included below.



*\*Existing A/C Condensate Recovery Rules for Cooling Systems*

New facilities with 100 tons or more cooling capacity must offset at least 10% of make-up water with alternative water.

New facilities with 200 tons or more cooling capacity must reuse A/C condensate onsite.

Austin's 100-year water plan, Water Forward, was approved by the Austin City Council on November 29, 2018. The plan calls for increased conservation, use of alternative waters, and storage strategies for use during drought.

On May 2, 2019, the Austin City Council directed staff to work on an accelerated schedule, where feasible, to include regulatory requirements for developments >250,000 square feet related to water benchmarking, dual plumbing, alternative water, and landscape transformation in Land Development Code Revision that is scheduled for adoption in December 2019.

## SUMMARY OF PROPOSED ORDINANCE CHANGES

### 23-9D-1020 Definitions

**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.

### 23-9D-1040 Development Project Requirements

- A site plan application for a small or large development project must include a completed water benchmarking application and water balance calculator.
- An applicant requesting approval of a large development project must meet with Austin Water 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 large development project must 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.
- The mandatory connection distance for small development projects remains at 250 feet.

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

- Regulatory framework for alternative onsite systems and incentive program to be implemented in Fall 2020
- Mandatory onsite water reuse systems and dual plumbing for large developments to be effective in 2023

**Downtown Austin Alliance  
October 4, 2019**

**Recommendations for Austin Water Forward Plan Proposed Regulations for New Land Development Code**

**General Recommendation for All New Austin Water Forward Regulations**

- Affordability impact should be determined by the City and made available to the public for all projects of all types (market rate, Affordable and affordable) and should include 1) Initial project costs, both construction/hard costs and design/soft costs and 2) operational costs.

**New Regulation #1 - Water Use Benchmarking**

***Development Project Requirements – Draft LDC Language Proposed by City Staff***

- (A) Beginning June 1, 2020, a small development project applicant shall submit to the director a completed water benchmarking application and water balance calculator as a condition for site plan approval.*
- (B) Beginning June 1, 2020, a large development project applicant, as a condition of site plan approval, shall:*
- (1) submit to the director a completed water benchmarking application and water balance calculator; and*
  - (2) meet with the director to discuss water efficiency code requirements, water use benchmarking data, and incentives and rebates for alternative water use.*

**General Recommendations**

- Water Balance Calculator should be easy to use and integrated with Site Development Permit (SDP) application process; input must not require level of detail that would not be available at site design phase (basic site data, for example: # of units, overall GSF)
- Benchmarking should serve the purpose of determining the ROI and payback period of installation
- Benchmarking data should be made publicly available on Austin Water Utility's (AWU) website (specific project data should not be made public until/upon each permit approval)

**Draft LDC Language Recommendations**

- The definition of "small" and "large" development projects needs to be clarified. If the threshold between small and large is projects >250,000 SF, we recommend defining it as a single building's GSF, not per phase, and not total development if separate buildings.
- Provide further information on the reason behind 250,000 SF building threshold and consider if appropriate.
- Meeting with AWU must be held within 10 business days of request for such meeting and/or date of SDP application – consider a standing "office hours" time each week.



## **New Regulation #2 - Onsite Water Reuse and Dual Plumbing:**

### ***Onsite Water Reuse System Rules and Incentive Program – Draft LDC Language Proposed by City Staff***

*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.*

*Beginning December 1, 2023, onsite water reuse systems are required for large development projects.*

### **Draft LDC Language Recommendations**

- Add item (3) Director shall revise original rules prior to December, 2023, to implement lessons learned from findings of life cycle evaluation of voluntary projects in program.
- The definition of “large” development projects needs to be clarified. If the threshold is projects >250,000 SF, we recommend defining it as a single building’s GSF, not per phase, and not total development if separate buildings.
- Provide further information on the reason behind 250,000 SF building threshold and consider if appropriate. Consider total water usage and water meter size as thresholds for compliance in lieu of building size.

## **New Regulation #3 - Reclaimed and Dual Plumbing:**

### ***Reclaimed Connection Requirements – Draft LDC Language Proposed by City Staff***

*(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.*

### **Comments and Concerns:**

- No stakeholder input has been offered on the reclaimed line connection and dual-plumbing requirement; it was not proposed during the Austin Water Utility stakeholder process. We do not recommend codifying these requirements until stakeholder input has been offered. It should include:
  - Estimations of construction cost of required extensions (hard and soft) between the existing reclaimed line and the new development and a description of the permitting process and timing
  - Testing on actual sites to determine cost/benefit impact

- Demonstration that the reclaimed water infrastructure supply is ready and adequate for added connections
- Best possible design for reclaimed water line system is at the regional scale where supply can be shared and where the size of the future extensions can be optimized.
- Consider a cost-sharing model by city such that development only pays proportional amount of cost of extension (hard and soft costs) and AWU fronts remaining costs with potential future reimbursements by future connections/developments.

#### **Draft LDC Language Comments:**

- The definition of a reclaimed water line needs to be clarified. We recommend it be defined as an existing, functioning line at least 60 days prior to the date of SDP application. This should be readily available information available on the AWU website and updated frequently.
- The definition of “small” and “large” development projects needs to be clarified. If the threshold between small and large is projects >250,000 SF, we recommend defining it as a single building’s GSF, not per phase, and not total development if separate buildings.
- We recommend redefining the requirement; Rather than the determining applicable projects based on a linear distance from the property the reclaimed system, the requirement should apply only to projects which are “immediately adjacent to in the reclaimed system in the City ROW”, effectively not requiring any off-site extension.

#### **Additional Questions and Concerns**

Answers to these questions would help the downtown development community understand the impact of these proposed regulations.

There are potential code and technical barriers:

1. Will the plumbing code be updated to allow for dual-plumbing systems inside buildings?
2. Will there be credit given for water quality treatment of grey water and/or allowance of reduced water quality treatment?
3. Are there additional State of Texas requirements?
4. Will sharing/regional/district wide solutions be allowed? If so, what are the ROW rules for such options? Private utilities crossing public ROW is currently prohibited by City.

There are potential operational barriers:

Note: Operational costs have not been studied/results not published as part of stakeholder process. Such studies are highly encouraged. High costs to operate that cannot be passed onto tenant may result in systems being “turned off” in the future.

1. What is the cost to operate these systems?
2. What are the qualifications of operators? Are they available and what is their cost?
3. Is there the potential/ease to “turn off” these systems?

Consider these types of incentives as the programs are being developed.

1. Grants/reimbursements to offset hard and soft costs

2. Additional density to offset operational costs by way of spreading those costs over more tenants/square footage
3. Discounted impact fees– suggest looking into water and wastewater impact fee reductions depending on type of reuse utilized in building design
4. Expedited permit review
5. Permit Fee reductions to offset initial costs
6. Discounted water and wastewater rates (could assist in operating cost control and incentivize future/long term use of systems)

Long Term Considerations/Concerns:

1. What are the long-term operations and maintenance needs?
2. What happens to these systems in the event of drought conditions?
3. What are the actual AWU cost savings/ownership cost savings that result from the implementation of these regulations?
4. Is there an affordability trickle-down effect? Short term affordability (cost of unit/rent) and long-term affordability (management fees and CAM costs) should be considered.